

# BUSINESS WEEK

YEAR  
AGO

WEEK  
AGO

START  
OF WAR  
1939



Eugene E. Wilson, air industry's  
spokesman for postwar air power.

WEEK  
INDEX

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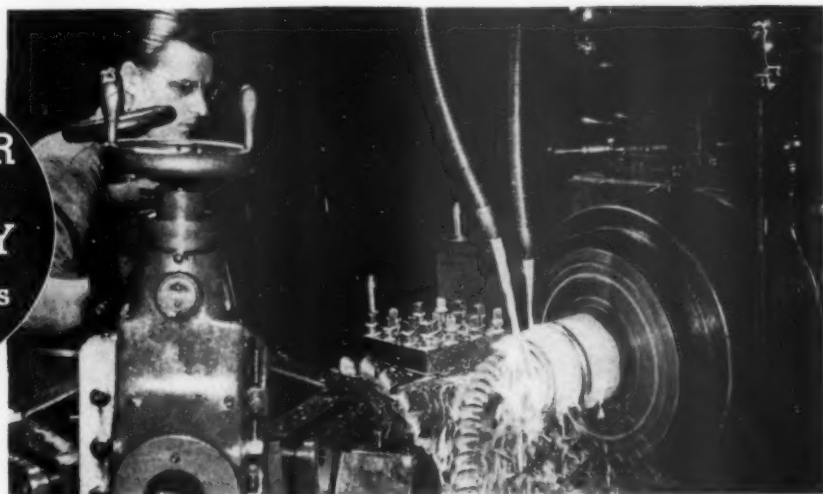
# The least we can give our soldiers is *Honesty*

**T**HE most cruel thing we can do to our soldiers and war workers is to fool them about their future. Much as we might like to give it, much as the heroes among them might deserve it—they are not coming back to a life of ease. The least we can do for them is to be honest.

Nobody in this world gets paid for long except out of what he produces. You build automobiles, I make shoes, he raises corn—and we exchange with each other. (That, shorn of all the fancy words, is all there is to wages.)

The more we all make and so add to the pool, the more we all will have, to divide. That is why every man and woman who does less than his best is fooling himself and harming you.

From all we hear about our fighting men, they want opportunity, not eyewash. And if they tackle their postwar jobs with the skill and determination they're showing today, they'll have us all jumping to keep up with them. We'd better get into the habit now.



YOU CAN TURN IT BETTER, FASTER, FOR LESS...WITH A WARNER & SWASEY



*In war or peace*  
**B.F. Goodrich**  
**FIRST IN RUBBER**




## Where flour dust is dynamite

*A typical example of B. F. Goodrich development in rubber*

FLOUR dust can be highly explosive. When anything that burns is broken into fine particles and mixed with the right amount of air, a single spark can cause an explosion.

Millers did everything possible to keep out of their plants anything that might cause sparks, but the greatest danger came from belts used to drive their machines. A running belt frequently built up static electricity. Because rubber wouldn't conduct electricity, the current would build up until the charge was strong enough to jump to some conductor — jump and spark.

Flour men were afraid of this danger and came to B. F. Goodrich for help. They found that B. F. Goodrich research men had already changed the very nature of rubber by developing a compound that carries electricity — the current flows through the rubber and is carried away. Belts made of this material — with *one billion times* the ability of ordinary rubber to carry electricity — have been protecting powder and chemical plants from explosions for several years. Static-conducting belts like those in the picture were installed in the flour mills and immediately ended threats of explosion.

There are many new B. F. Goodrich developments you may not know of that might solve a problem for you. And there have been many improvements in older products. For B. F. Goodrich research is continuous, on old products as well as new. If you have a problem that might be solved by rubber — natural or synthetic — write *The B. F. Goodrich Company, Industrial Products Division, Akron, Ohio.* 

**B.F. Goodrich**  
RUBBER and SYNTHETIC products

# CHARGE ONE WHILE THE OTHER WORKS

Thousands of battery industrial trucks are working 24 hours a day handling materials in war plants. As a rule, one battery operates a truck for 8 to 12 hours, then is exchanged for another that has been charged meantime. Thus, except for the two or three minutes needed to exchange batteries, the truck need not stop work for servicing of its power unit.

A battery industrial truck has electric-motor drive, which means quiet operation, freedom from vibration and fumes, and a minimum of wearing parts. It starts instantly yet consumes no power during stops. It uses low-cost electric power. Altogether, it is one of the most dependable and economical types of handling equipment, especially in 24-hour-a-day operation.

It is extra dependable and extra economical when powered by Edison Alkaline batteries. With steel cell construction, a solution that is a natural preservative of steel, and a fool-proof principle of operation, they are the most durable, longest lived, and most trouble-free of all types of storage batteries. *Edison Storage Battery Division of Thomas A. Edison, Inc., West Orange, New Jersey.*

## GETS FOUR "NEW" BATTERIES FREE

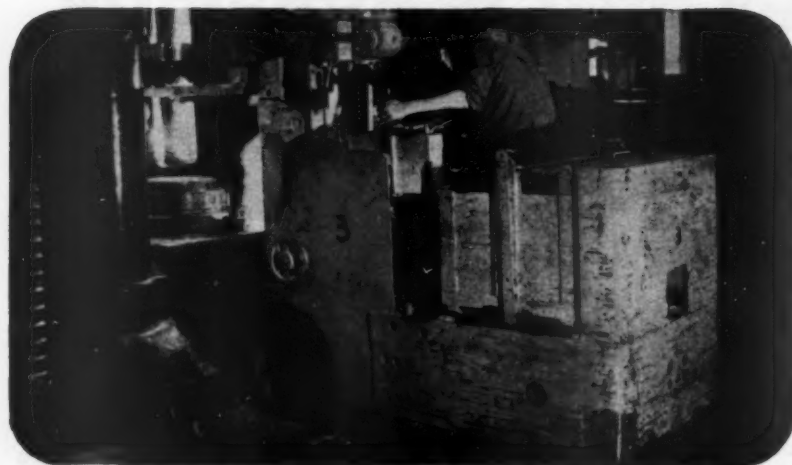
### A Typical Illustration of Alkaline Battery Dependability

The electrician of an industrial plant needed a standby power battery. Instead of buying one, he assembled one from cells of industrial-truck batteries that were being replaced. Their capacity, no longer sufficient for truck duty, was ample for the relatively light demands of the standby job.

That was around the start of the war. The "new" battery was so satisfactory that he has since made up others; he now has four supplying standby power for auto calls, emergency lights, clocks, etc., all from cells of batteries that had delivered eight years' service or more in industrial trucks.

**Edison**

**ALKALINE BATTERIES**



Changing the punch on the ram of a press is a job that is being simplified by the use of the fork-lift type of truck in the manner illustrated here. Articles describing new developments in handling methods appear regularly in our publication, **STORAGE BATTERY POWER**. Write for a sample copy if you do not already receive it.

## BUSINESS WEEK

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# WASHINGTON BULLETIN

## Whose Reconversion?

Regardless of how the broad-gauge fight over reconversion turns out, industry can take one point as settled: no government agency is going to blueprint reconversion on a plant-by-plant basis. This job is up to businessmen. In most cases, they will have to handle it individually rather than collectively.

WPB's top officials mean to hammer this fact home during the next few months. They are getting worried over the way businessmen look to them for directions when they lose a war contract or see a chance to take on additional business.

## Partial Change-Overs Now

Officials stress that a manufacturer doesn't have to wait for across-the-board relaxation of controls to get back into civilian lines. They promise that if he is not needed for war work, they will give him a go-ahead on something else—if he can figure out a way of making it without taking scarce materials, components, or manpower away from war production.

Getting clearance on civilian projects will be easier after Aug. 15, when WPB plans to make effective its "spot authorization" order (page 15), but officials contend that manufacturers who figured out an acceptable plan have been getting special dispensations right along.

## Manpower Is the Big Hurdle

Qualifications which a manufacturer must fulfill in setting up an acceptable plan for resuming production of civilian goods are hard to meet.

Manpower, the first big hurdle, stops a lot of manufacturers in their tracks. WPB takes the War Manpower Commission's decision as to whether or not a specific proposal will interfere with recruitment of labor for war work. WMC doesn't believe in taking chances by relaxing production restrictions. It is hard-boiled in tight labor areas and in regions where it hopes to persuade labor to migrate, but in some spots it can afford to go easy. In easy labor areas on the West Coast, for example, WMC is now ready to admit that it has drained off all movable labor by intensive recruitment.

Components are another stumbling block. The odds are against any manufacturer who wants to make a

complicated item, for chances are that he will need some critical material or product. The man who wants to make something that has power-driven rotating parts has two strikes on him—the shortage of bearings and the critical production situation in fractional horsepower motors.

## Tip From the Board

WPB's advice to the manufacturer who has lost his war contract runs like this: Decide what you can make and what you can market. If you can turn out an essential civilian item, plan on that. If not, pick any simple item that you can make without scarce manpower or materials. Then take your troubles to the regional WPB office. The odds are that eventually you will get permission to go ahead, even if all you can make is hors d'oeuvre trays.

## Small Share for Retailers

Retailers, who have sided consistently with the advocates of early reconversion, will find that the limited steps WPB is ready to take now won't result in the sort of goods that bolster sales volume.

But they will reap two benefits (probably in time for the Christmas trade):

(1) The quality of much merchandise will be improved.

(2) There will be a greater variety of small hard goods which should fill some of the holes in their unbalanced stocks.

## Focus on Foreign Affairs

The Democrats are pinning hopes for a winning campaign on their strategy of pushing domestic issues to the background and placing foreign policy in the forefront of the fourth-term appeal.

This is why the platform committee at Chicago placed so much emphasis on the party's plank covering participation in the peace and putting teeth into the Connally resolution.

The Democrats see gaping holes in the Republican foreign affairs stand, and they feel pretty certain that Gov. Dewey and Gov. Bricker are not going to be able to plug them.

Instead of removing foreign policy from the heat and scuffles of the election, President Roosevelt appears ready to make it the dominant note of his commander-in-chief campaign (page 111).

## F.D.R. Kept in Touch

Robert E. Hannegan, Democratic national chairman, wasn't the only line of communication with which the itinerant President Roosevelt kept in direct and regular contact with the convention. War Mobilization Director James F. Byrnes was on hand throughout the deliberations—and he had special telephone facilities in his hotel suite.

## Draft Goals Achieved

Barring major unexpected military reverses, the draft should never again be a serious problem to industry (BW—Jun.24'44,p10).

Both the Army and Navy actually are above their goals, putting the draft machinery on a replacement basis. Replacement needs for the services are estimated at about 80,000 a month—70,000 for the Army and 10,000 for the Navy.

Of the 100,000 youths reaching 18 each month, from 60,000 to 70,000 should qualify for full military service. The remaining 10,000 to 20,000 draftees can easily be found without placing a serious drain on industry.

And if draft needs should increase again by fall, Selective Service may be expected to apply additional pressure on farm deferments where the only large pool of young able-bodied men out of service may be found.

Navy's announcement last week end that it had reached peak strength was conservative; it probably is 30,000 over its goal of 3,630,000. Army reached peak of 7,700,000 in April, now tops that by close to 300,000.

## Keeping the A-B-C Grades

In lieu of asking Comptroller General Lindsay Warren to rule on whether Agricultural Marketing Administration A-B-C grades can be used in pricing the 1944 canned vegetable pack (BW—Jul.15'44,p96), OPA may present Warren—and the canners—with this alternative:

The processed foods price regulation would be based on commercial grades—fancy, extrastandard, and standard. But the regulation would state that the most accurate description of these grades is to be found in the U. S. Standards (which define AMA grades). Any canner who did not price in accordance with the government grades



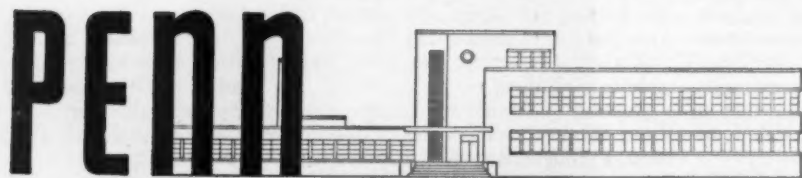


**T**HE hand that sets the thermostat is the hand that can help *minimize next winter's fuel shortage!*

Automatic control is the first step in fuel conservation. But, automatically-controlled heating plants must be put in "tip-top" shape . . . *controls must be adjusted, repaired or replaced, when necessary.* And hand-fired systems, too, can save fuel by the installation of simple automatic damper controls.

Fighting fuel waste is not a new battle for PENN heating controls . . . *they have long been a preferred means of securing fuel economy* in home, factory or commercial establishment. PENN Temtrol . . . heat anticipating thermostat . . . prevents needless generation of heat and assures even regulation of temperature to give maximum comfort and efficiency with minimum use of fuel.

Don't delay . . . call your heating man now . . . let him help you save fuel next winter. *Penn Electric Switch Co., Gosben, Indiana.*



## **AUTOMATIC CONTROLS**

**FOR HEATING, REFRIGERATION, AIR CONDITIONING, ENGINES, PUMPS AND AIR COMPRESSORS**

consequently would be found in violation of the regulation.

There would be a loophole, however. The proposed regulation reads: "Despite such failure (to comply with government specifications), the sale shall not constitute a violation of this regulation if it appears that the standards, as generally understood in the trade, differ in any material respect from the U. S. Standards and that the goods meet the requirements of the claimed grade as so understood in the trade."

OPA worked up this one after conferring with canned goods brokers, who customarily arbitrate trade disputes arising out of grades (and who would probably be consulted in any enforcement action arising out of the new regulation). The brokers assured OPA that when they have a tough case to arbitrate, they have to go to the AMA specifications.

## Jones Juggled the Points

War Food Administrator Marvin Jones went over OPA's head this week and ordered rationing officials to take point values off lower grades of beef and put them back on ham and pork roasts. Instead of the customary memorandum, he inserted a formal directive in the Federal Register. (WFA requested that publication be delayed for ten days—to avoid tipping the public off to what would happen Aug. 1—but everything received by the register is public property, published or no.)

Jones was tired of having OPA fiddle around before making point changes. OPA is angry because Jones acted when Price Administrator Chester Bowles was on vacation and Economic Stabilization Director Fred M. Vinson and War Mobilization Director James F. Byrnes were in Chicago. Jones is paying no attention to OPA's argument that, since pork was never technically taken off rationing (point values were reduced to zero), WFA can't put it back on.

## FTC Tackles Export Pools

The Federal Trade Commission is beginning a general house-cleaning of export pools which have been formed under the Webb-Pomerene law. FTC's investigation of the Florida Hard Rock Phosphate Assn. and the Phosphate Export Assn., announced this week, is the first in a series of such actions.

FTC apparently has realized that if it doesn't crack down on export pools, the Justice Dept.'s Antitrust Division will take the play away from it. The division's chief, Wendell Berge, announced some months ago that Justice was going to look into monopolistic abuses of the Webb-Pomerene law as part of its anticartel activities.

The division has already moved against the Alkali Export Assn. This case is now held up in the U. S. District Court for the southern district of New York, where the association has asked for dismissal on the grounds that

FTC has exclusive jurisdiction under the Webb-Pomerene law.

Whichever way the court's decision goes, the case is almost certain to wind up in the U. S. Supreme Court. But the Antitrust Division can be expected to bring action against two or three more export associations without waiting for a final decision in the Alkali case.

## Berge Watches Cement

The Antitrust Division may move into another field which FTC has claimed for its own—basing-point sys-

## Payoff Man—Both Cash and Sympathy

Handsome, affable Robert Henry Hinckley, just appointed director of contract settlement, is taking on a job that will test his affability to the limit. He will be the payoff man in the liquidation of the war program. When the horizontal termination of war orders starts, his assignment will be to follow up with cash and sympathy in unprecedented quantities at unprecedented speed (BW—Jul. 1 '44, p17).

Actual negotiation of settlements will be handled by the various procurement agencies that originally wrote the contracts. Hinckley's office will lay down broad policies covering settlements and interim loans, supervise their administration, and see to it that the whole process moves fast enough to keep contractors from going broke while they wait for their termination payments.

Hinckley's general background is reassuring to businessmen who feared that the new director would be a hard bargainer, or—even worse—a slow one. He is a Utah businessman and moderate New Dealer, who has been in and out of the government ever since Roosevelt's first term. He took on his first federal job in 1933 when he was western director of the Federal Emergency Relief Administration. Later he was assistant administrator of FERA, then assistant administrator of WPA.

From 1935 to 1938, he was a member of the Civil Aeronautics Authority, from 1939 to 1940, chairman. Secretary Harry Hopkins took him into the Commerce Dept. in 1940 as assistant secretary for air. His main job during the two years he spent in Commerce was setting up

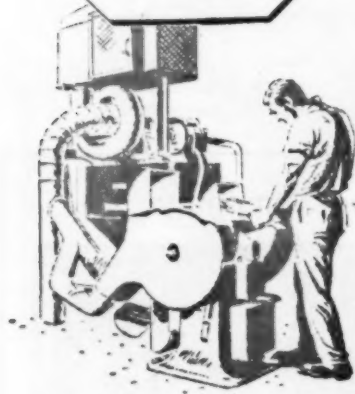


the civilian pilot training program.

He joined the Sperry Corp. in 1942 as assistant to the president, Thomas A. Morgan; later he became a vice-president. His connection with Sperry and with Morgan, who has strong political influence, clinched his appointment as director of contract settlement after John M. Hancock, chairman of the temporary Joint Contract Termination Board, had declined to take on the permanent post just created by Congress.

Personally, Hinckley will have a soothing effect on worried manufacturers. He is tall, calm, slow-spoken. Although he is a good listener, he can be stubbornly persuasive when he sets out to make a point.





**M**ANUFACTURERS of materials for war have long since realized the importance of dust control. It isn't the number of people or the hours they put in that count so much as what is accomplished by those people within those hours, and here AAF has contributed its share to increased production by eliminating the dust that sabotages both men at work and materials in process.

Post-peace dust control will be just as important as war time dust control, for peace time competition will demand careful consideration of all the factors that can result in lowering manufacturing costs. We are prepared now to help you. Send for "AAF in Industry".

**AMERICAN AIR FILTER CO., INC.**  
387 CENTRAL AVE. LOUISVILLE 8, KY.  
In Canada: Darling Bros. Ltd., Montreal, P. Q.



tems of price fixing. The division is building up a docket against the cement industry. If Marquette Cement Mfg. Co. should be successful in its efforts to get FTC's jurisdiction set aside (page 100), Berge is ready to step in. He may do so anyhow.

### Grape Prices May Stand

When California grape growers went home from Washington this week they were still able to charge all that the traffic will bear. After threatening to clamp down on grape ceilings (BW—Jul.15'44,p42), OPA avoided the issue and hid behind "administrative difficulties," which actually meant that the agency had no authority to impose ceilings on cooperatives (35% of the crop) and vintner-growers (20% of the crop). These growers own their own wineries.

OPA has two other strings to the bow with which it hopes to shoot down grape prices. It can lower the ceiling on grape sales for table use, and on bottled wines. Grape growers feel that if wineries could pay last year's high prices for grapes and still make profits on the booming wine market, OPA ought to narrow the vintners' margins, not theirs.

### Market for War Plants Is Bright

Civilian experts who have been surveying postwar prospects of Army war plants for the Corps of Engineers think the outlook for sale and use is pretty bright (page 56).

In the case of a highly specialized bag loading plant in a nonindustrial area, for example, they found five potential bidders, including a soap company which wants to set up a soybean oil mill, a radio manufacturer, and a farm implement concern. Almost all the facilities will be snapped up when they go on the block.

The once-sleepy Tennessee town of 3,500 where this plant was built now has approximately 25,000 workers employed. Two-thirds of them were drawn from within a radius of 30 miles of the town. The municipality is talking of taking over the power plant and the new water and sewage systems.

—Business Week's  
Washington Bureau

### THE COVER

Briefing Washington on the aircraft industry's postwar course for aviation, Eugene E. Wilson spoke from the experience of one who has built planes for both war and peace (page 24).



### A HOT ONE!

Workers' hands are handling some hot ones . . . and workers' hands *must be protected* so that injuries will not cause days—perhaps weeks!—lost from the job.

JOMAC INDUSTRIAL WORK GLOVES are playing a leading role in America's great production record . . . preventing injuries, speeding production, offering new *economy* features in their long-wear and washability. The unique Jomac fabric is a loop-finished cloth that is thick with protective "cushions." These gloves are available in many styles, including special Heat-Resisting models.

Let us send you the complete details on how *economy* and *increased production* are achieved with JOMAC INDUSTRIAL WORK GLOVES.

C. Walker Jones Co., 6135 North

Lambert Street,  
East Germantown,  
Philadelphia 38,  
Pennsylvania.



WORKING  
IN AMERICA'S  
GREAT SHOPS

**JOMAC**  
INDUSTRIAL  
WORK GLOVES

# THE OUTLOOK

BUSINESS WEEK

JULY 22, 1944



**Let's take a searching look at this much-talked-of but little-understood matter of reconversion. Do you know where you stand?**

Everyone is acquainted with the broad pattern. America must have an economy of \$140,000,000,000 a year instead of \$80,000,000,000; every manufacturer must hire more people and produce more goods; postwar deflation must be avoided by careful adjustment of cutbacks, swift settlement of terminated contracts, smooth disposal of surpluses.

But what are the plant-by-plant problems that underlie all this?

**Timing**—For one very important reason, every manufacturer has to make the major decisions on reconversion right now: WPB has opened the door for civilian production a crack (page 15), and it is prepared to help any ingenious management pry it open further (page 5).

These WPB plans mean piecemeal reconversion, make no allowance for launching industry-wide programs for many weeks or maybe months.

Consequently, you have to decide whether you want to play lone wolf or whether you will be farther ahead if you unite with the rest of your industry in drawing up an over-all when-and-as plan for maximum sales and employment when the war gets far enough along to permit.

**Competition**—Companies that plan to go it alone in reconversion should realize all the obstacles they face in manpower, tools, new models, materials, component parts, costs, and price controls.

Most producers in heavy consumer-durable-goods lines such as autos and mechanical refrigerators feel they will be unable to get over those hurdles until Germany is knocked out of the war. They would like to wait and start under more favorable circumstances.

Smaller manufacturers, willing and perhaps able to jump the gun, are frankly afraid that they might face later competitive reprisals.

Thus newcomers in any given field are the most likely gun jumpers. Yet the very officials in WPB who are inviting all comers to present plans believe that established companies—even though off to a late start—will win the lucrative business because of know-how, lower costs, better pricing, and established sales organizations.

**Procedure**—To the bold, WPB offers three main and overlapping avenues for getting going on production of civilian goods:

(1) The new "spot authorization" plan (page 15), due to go into effect Aug. 15, under which manufacturers who can meet certain standards may get the go-ahead from local WPB offices.

(2) The unofficial, broader, more elastic plan under which WPB will let anybody with the manpower and facilities make just about anything that doesn't interfere with war production (page 5).

(3) The established "appeals" procedure (page 17), which will be less important as the first two become operative.

Your local WPB representative soon will be able to tell you how far you can go under all these procedures.

**Manpower**—Everything in reconversion hinges on available workers.

Survey your labor force. Make sure that, in putting men on civilian work, you aren't hoarding labor needed by a nearby war producer. Then get clearance from local War Manpower Commission officials, or see if your

# THE OUTLOOK (Continued)

**BUSINESS WEEK**  
**JULY 22, 1944**

regional WPB will do it for you. (This finally has to clear in Washington because it may not fit WMC's national programs.

Even if you have no idle labor, you have a chance. There's the case of a plant running three shifts on war work but with one idle production line for its civilian product. It got permission for its men to put in eight hours on war work, then four hours overtime on civilian output.

•  
**Materials**—Don't go to WPB for help until you have decided what you want to make. And don't plan to make anything that requires any quantity of the following:

Carbon steel, particularly sheets and plants. The huge programs for heavy artillery, shell containers, landing craft, tanks, etc., are pushing everything else way down the list on steel companies' order books.

Copper and brass, particularly rods and bars. Shells for our heavy artillery are taxing capacity.

Sidelight: WPB has succeeded in converting the Extruded Metals Defense Corp. (Government-owned plant in Grand Rapids) from extrusion of aluminum rods and bars to brass. The plant had served its usefulness in the aluminum program, was held in standby position. Now certain furnaces have been added, and it is beginning to extrude brass for shells.

•  
**Components**—Fractional-horsepower motors, forgings, and castings still are the most critical items. Antifriction bearings aren't easy.

•  
**Facilities**—Management of any company knows if it has the tools (not needed in the war effort) to make something. Safest ground is to choose a product labeled "essential" by WPB, but even cocktail shakers aren't taboo.

You may order reconversion tools after July 29, but you can't expect delivery until tool builders get ahead of the new rush of war work (BW—Jul. 8'44, p22).

The Surplus War Property Administration has announced a pricing formula for sale of surplus machine tools, but you can't buy them until they are declared "surplus" by the war agencies owning them.

•  
**Pricing**—WPB has been working with OPA on the establishment of a price policy that will expedite reconversion, but don't expect a gold rush.

Those who are talking about immediate reconversion prices 25% to 40% up are in for a rude shock. OPA won't permit such jumps, doesn't favor incentives.

Most products, even though they haven't been manufactured for a long time still are ceilinged under the General Maximum Price Regulation.

OPA has yet to set policy between multiple-line and single-line producers, between companies that will have no war work and those that will have substantial munitions business along with reconversion products.

In figuring new prices, there still is a tendency to compare profits, before taxes, with the average in the 1936-39 period.

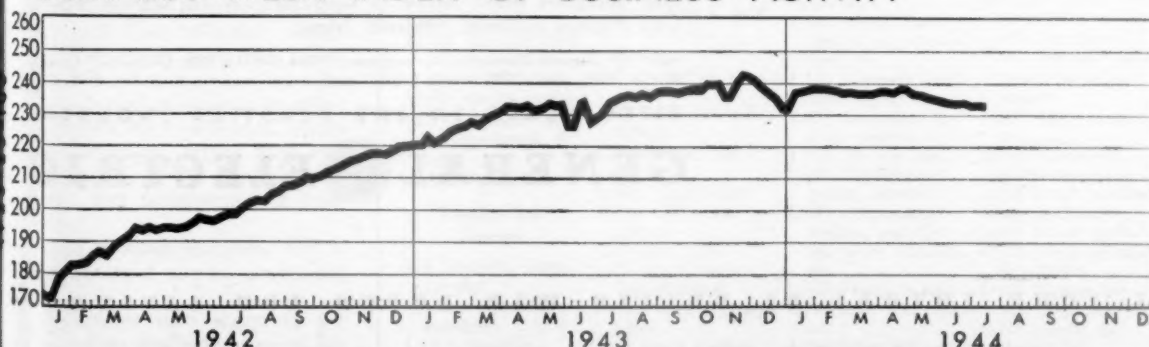
Straight reconversion costs positively will not be allowed as production costs.

Those are just some samples. OPA doesn't intend to be a bottleneck because it fully appreciates the importance of the reconversion plans. If it slows up your plans, it is acting conscientiously.

# FIGURES OF THE WEEK

	\$ Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
THE INDEX (see chart below). . . . .	*234.1	*234.3	*234.8	*238.3	236.3
<b>PRODUCTION</b>					
Steel Ingot Operations (% of capacity).....	97.2	95.7	97.3	96.1	97.7
Production of Automobiles and Trucks.....	19,420	14,600	18,985	17,770	19,485
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$6,607	\$6,256	\$5,362	\$6,884	\$11,093
Electric Power Output (million kilowatt-hours).....	4,377	3,941	4,287	4,539	4,184
Crude Oil (daily average, 1,000 bbls.).....	4,602	4,579	4,568	4,373	4,103
Bituminous Coal (daily average, 1,000 tons).....	1,731	2,008	2,088	2,042	1,943
<b>TRADE</b>					
Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars).....	83	84	81	74	80
All Other Carloadings (daily average, 1,000 cars).....	65	66	64	53	66
Money in Circulation (Wednesday series, millions).....	\$22,561	\$22,598	\$22,333	\$20,404	\$17,658
Department Store Sales (change from same week of preceding year).....	+2%	+11%	+2%	-3%	-1%
Business Failures (Dun & Bradstreet, number).....	15	21	30	39	48
<b>PRICES (Average for the week)</b>					
Spot Commodity Index (Moody's, Dec. 31, 1931 = 100).....	248.4	249.4	250.1	247.3	243.5
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	165.2	165.2	165.3	160.8	160.2
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	224.2	224.4	224.3	218.1	210.4
Finished Steel Composite (Steel, ton).....	\$56.73	\$56.73	\$56.73	\$56.73	\$56.73
Scrap Steel Composite (Iron Age, ton).....	\$19.17	\$19.17	\$19.17	\$19.17	\$19.17
Copper (electrolytic, Connecticut Valley, lb.).....	12.000¢	12.000¢	12.000¢	12.000¢	12.000¢
Wheat (No. 2, hard winter, Kansas City, bu.).....	\$1.52	\$1.52	\$1.57	\$1.64	\$1.40
Sugar (raw, delivered New York, lb.).....	3.74¢	3.74¢	3.74¢	3.74¢	3.74¢
Cotton (middling, ten designated markets, lb.).....	21.73¢	21.99¢	21.59¢	20.06¢	20.85¢
Wool Tops (New York, lb.).....	\$1.340	\$1.340	\$1.340	\$1.272	\$1.370
Rubber (ribbed smoked sheets, New York, lb.).....	22.50¢	22.50¢	22.50¢	22.50¢	22.50¢
<b>FINANCE</b>					
90 Stocks, Price Index (Standard & Poor's Corp.).....	104.4	105.0	102.3	94.3	99.5
Medium Grade Corporate Bond Yield (30 Baa issues, Moody's).....	3.57%	3.57%	3.59%	3.76%	3.80%
High Grade Corporate Bond Yield (30 Aaa issues, Moody's).....	2.72%	2.72%	2.73%	2.72%	2.69%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average).....	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6 months, N. Y. City (prevailing rate).....	½%	½%	½%	½-¾%	½-¾%
<b>BANKING (Millions of dollars)</b>					
Demand Deposits Adjusted, reporting member banks.....	32,481	32,561	37,229	34,308	32,883
Total Loans and Investments, reporting member banks.....	57,211	56,262	50,405	49,539	46,822
Commercial and Agricultural Loans, reporting member banks.....	6,040	6,037	5,913	6,360	5,638
Securities Loans, reporting member banks.....	3,802	3,742	1,886	1,964	1,507
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks..	41,917	41,048	37,259	36,044	34,165
Other Securities Held, reporting member banks.....	2,963	2,931	2,897	2,779	2,982
Excess Reserves, all member banks (Wednesday series).....	1,600	1,500	1,100	1,128	1,310
Total Federal Reserve Credit Outstanding (Wednesday series).....	15,236	15,085	15,606	12,315	8,150
‡ Preliminary, week ended July 15th. § Index revised for first six months of 1944 (BW-Jul.8'44,p.34). ¶ Ceiling fixed by government. † Revised. § Date for "Latest Week" on each series on request.					

## BUSINESS WEEK INDEX OF BUSINESS ACTIVITY







# GOING AROUND TOGETHER

In enough plastics compound to make a cubic inch of molded plastics, chemists cagily estimate that 10,000,000,000,000,000,000,000 molecules are going around together in a mad whirl. Above you see two styrene molecules on their way to join hands with their friends so strongly that they finally become the finished plastic parts with which you are so familiar. In the laboratory of the General Electric Company, skilled chemists work daily developing materials for vital war uses. From these developments will come new materials to make brighter tomorrow's living. Because the General Electric Company molds and fabricates all types of plastic material, this development is necessary so that they may give you the newest and best compounds for a solution to your molding problem. G-E technicians—engineers and designers stand ready to help you. Write Section 1-307, One Plastics Avenue, Pittsfield, Mass.

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FIFTY YEARS IN THE PLASTICS INDUSTRY

**GENERAL  ELECTRIC**

PD-208

INSURE YOUR FUTURE BY BUYING WAR BONDS AND SAVING THE



## Blueprint for Civilian Goods

WPB's "spot authorization" plan, effective Aug. 15, will ease conversion for many manufacturers. But it means more planning on the part of businessmen. Disappointing delays are likely.

WPB keeps to its timetable, on Aug. 15 its regional offices will get authority to take individual manufacturers out from under a long list of limitations and conservation orders (see list). This is the "spot authorization" plan, a cornerstone of reconversion.

**Detailed Plan**—it will be the last of WPB Chairman Donald M. Nelson's broad reconversion orders (BW-15'44,p5) to become effective. (The other three give the go-ahead for manufacture of experimental models, ease controls on aluminum and magnesium, allow companies to contract now for machine tools that will be needed in civilian goods production.)

The plan will do more than merely end the starting gun. It will carry detailed blueprints on the civilian goods WPB wants more of first (box, page 16) and it will tell business what it can expect in making them and how to get it. It will show what help can be expected by the man who cannot make the goods that WPB wants.

**Delays Are Expected**—But before they get the details, manufacturers will do well to make of a note of these reservations:

(1) The plan does not yet have the support of the WPB organization. It is actively opposed by the Army and Navy. This means that there will be delays and delays. Even if the plan goes into effect on schedule, it may not be fully implemented.

(2) Many critical materials are still scarce (page 9). For the first few months, at least, materials for increased civilian production will have to come almost wholly out of excess and idle inventories.

(3) There is nothing automatic about the plan. It will force individual manufacturers to do more, rather than less, planning (page 5). WPB can help with delivery, but reconversion is business' baby.

**May Look Around**—Roughly, this is the plan (as it is now conceived) for work.

A manufacturer who wants to get into civilian production—up to his neck or in a small way with one assembly line in a plant that is otherwise on

war work—will figure out what civilian goods he can make (WPB wants him to look over the field, instead of merely limiting his list to his prewar products).

He will know what surplus, excess, and idle inventories of materials, components, and semifabricated parts he has on hand (or can get from somebody else) and which can be used in the products he wants to make. He should know his requirements for new materials and components.

• **Must Study Manpower Needs**—He will have to know his manpower requirements—in terms of the number of

production workers needed and whether he has, or can get, these workers without interfering with war production in his own shop and without draining the local manpower supply if he is in a critical labor shortage area.

If he can make one of the items on WPB's "essential" list, without straining the manpower supply and with materials he has on hand, he will get WPB's blessing and permission to go ahead.

• **Materials Troubles**—If he needs any large amount of new materials, he is likely to run into trouble. Regional offices will receive allocations of controlled materials from a central pool and will have the authority to dole these materials out to manufacturers of essential goods. However, as long as materials continue to be scarce, WPB will be stingy.

A manufacturer who cannot make an essential item (and can prove it to WPB's satisfaction) can still get per-

## Relaxing Controls for Civilian Output

When the War Production Board's so-called "spot authorization" regulation becomes effective—probably Aug. 15—regional offices will have the power to relax at their discretion certain conservation and limitation orders, insofar as they restrict production. Other provisions of the orders (types of models permitted, amount of raw material allowed per unit, inventory restrictions, etc.) may not be relaxed. Additions and subtractions to the list of orders can be expected before the plan goes into effect. The preliminary list follows:

Conservation Orders			
M-1-i Aluminum	Copper	L-21-a Automatic phonographs, gaming machines	L-75 Coal stokers
M-2-b Magnesium		L-27 Vending machines	L-80 Outboard motors and supplies
M-8-a Cork (direction 1 only)		L-29 Metal signs	L-89 Elevators and escalators
M-9-c		L-30-a Galvanized ware	L-91 Commercial laundry eqt.
M-9-c-1		L-30-b Enameled ware	L-92 Fishing tackle
M-9-c-2	Zinc	L-30-c Cast iron ware	L-98 Domestic sewing machines
M-9-c-3		L-30-d Miscellaneous cooking utensils (paragraph C only)	L-104 Metal hair pins
M-11-b		L-36 Umbrella frames	L-136 Church goods
M-38 Lead	Steel	L-37-a Musical instruments	L-140-b Flat and hollow ware
M-95 Rhodium		L-49 Beds and bed-springs	L-142 Metal doors, doorframes, shutters
M-126 Iron and steel (except stainless steel restrictions)		L-52 Bicycles and parts	L-151 Domestic watt-hour meters
M-146 Quartz crystals	Silver (paragraph E only)	L-54-a Typewriters	L-173 Domestic space heaters
M-199 Treasury silver (paragraph E only)		L-54-c Office machinery	L-176 Electric fans
M-302 Osmium		L-55 Shot guns	L-180 Replacement storage batteries
Limitation Orders		L-62 Metal household furniture	L-182 Commercial cooking and food and plate warming eqt.
L-6 Domestic laundry eqt.	Vacuum cleaners	L-65 Electrical appliances	L-185 Water heaters
L-13-a Metal office furniture		L-67 Lawn mowers	L-187 Cast iron boilers
L-18-b Vacuum cleaners		L-73 Office supplies	L-188 Loose leaf metal parts and units
			L-190 Scales, balances, and weights
			L-199 Plumbing and heating tanks
			L-205 House trailers
			L-222 Floor finishing machines
			L-225 Electrical conduit
			L-227 Fountain pens; mechanical pencils
			L-227-a Pen nibs
			L-227-b Pencils and penholders
			L-238 Sun glasses
			L-254 Internal combustion aircooled engines
			L-257 Farm machinery
			L-270 Automotive maintenance eqt.
			L-292 Food processing machinery
			L-301 Power cycles
			L-308 Domestic food dehydrators
			L-325 Motion picture projection eqt.
			L-329 Staples and staplers
			L-331 Motorcycles.

## Preferred Items for Reconversion

In addition to the relaxation of certain controls (box, page 15) the War Production Board is expediting the conversion to civilian production by offering to award preference ratings up to AA for the manufacture of specified items which are critically short. These items (about 125 on the present tentative list, which may be changed somewhat before the plan goes into effect) have a preferred status in the reconversion picture, in that they are the only ones on which priority assistance will be granted. In addition, if a manufacturer is able to produce one or more of them, but refuses to do so, permission to produce items not on the list may be denied by WPB.

Cooking and heating appliances	Church goods	Wire garment hangers	Infants' play pens
Cooking utensils of glass, aluminum, enamelware, stainless steel (commercial and domestic)	Clothes pins	Hand and electric hair clippers	Pot scourers
Commercial cooking and heating electric appliances	Coffee pots	Harass hardware	Safes, deposit boxes
Other commercial electric appliances	Coal hods	Electric space heaters	Saucepans
Lighting devices and supplies	Combs	Unit heaters and ventilators	Scales, laboratory and balance
Commercial food preparation and serving fixtures, equipment and appliances	Cots, bunks, roll-aways	Electric heating pads	Fireplace screens
Builders' hardware	Cream separators	Hot plates	Domestic sewing machines
Kitchen utensils	Diaper cans and pails	Ironing boards	Shelving
Office machinery and supplies	Dinnerware (flatware, hollowware)	Electric and gasoline flatirons	Small arms (shotguns)
Photographic equipment and supplies	Dishpans	Covered kettles	Insecticide spray guns
Plumbing fixtures, fittings, and trim; sanitary ware	Double boilers	Flat wick lamps	Window and roller shades
Ashears	Blued steel drip pans	Kerosene mantel lamps	Shovels
Baby bath units	Dustpans	Lanterns (gasoline pressure, tubular, wick)	Sofa beds, studio couches
Bathtubs	Eggbeaters	Commercial laundry machinery	Staples and staplers
Infants' enameled bathtubs	Enamel ware (other than kitchen utensils)	Hand-power lawn mowers	Household steel wool
Bed springs (box, coil, flat, and metal crib springs)	Electric fans (domestic and commercial)	Lunch boxes	Stokers
Metal bedsteads	Fishing equipment, supplies	Marking devices	Strainers
Bicycles	Flashlight cases	Innerspring mattresses	Carpet sweepers
Cast iron and steel boilers, range boilers	Household table flatware	Model airplane motors for war training	Hot-water storage tanks, water tanks
Floor (farm) brooders	Floor finishing and maintenance machinery	Mop handles, wringers	Tape-sealing machines
Can openers	Forks (hay, manure, spading)	Motion picture projection equipment	Tea kettles
	Flour sifters	Pails and buckets	Household thermometers
	Fountain pens	Poultry netting	Tire pumps
	Frying pans	Pencils, mechanical and woodcased	Tool handles
	Funnels	Pen nibs	House trailers
	Garbage cans	Percolators	Typewriters
	Fireplace grates	Pickaxes	Umbrellas
	Farm grease guns	Pins, common and safety	Utility baskets
	Gutters (including downspouts and other sheet metal rain goods)	Bob pins and hair pins	Vacuum bottles
			Domestic, industrial vacuum cleaners
			Household galvanized wash boilers
			Domestic washtubs
			Hot water heaters and generators (all types)

mission to go ahead—if the product he wants to make is controlled by one of the L or M orders over which field offices have authority. But he won't be given any help in the form of preference ratings or scarce materials.

• **Authority Is Limited**—In the beginning, field offices will have authority to relax orders and administer production controls only for plants with a total labor force (after the addition of new civilian production) of less than 250. In Group I (acute labor shortage) and Group II (serious labor shortage) areas this figure is pared down to 100, and on the west coast it is 50. Bigger plants cannot get back into the stream without Washington's permission, but regional offices can help them.

Regional offices also will not have the final say-so with respect to civilian

goods requiring critical components, the tightest shapes of steel (including sheet), and aluminum foil.

• **Likely Prospects**—Production of the major electrical appliances—washing machines, refrigerators—will be laid out by Washington in detailed plans, but such reconversion cannot come before 1944's fourth quarter and is much more likely in 1945's first quarter. Even if WPB could lay its hands on enough fractional horsepower motors and steel (or aluminum) to produce a few washers or refrigerators, manufacturers are not interested in small production runs.

Vacuum cleaners, which are produced in integrated plants that can take care of their own needs for motors, may well be the first major appliances to make its reappearance on the market. Sewing machines, also made in inte-

grated plants, are another likely candidate.

• **"Squeeze" Level**—The list of essential goods which accompanies the spot authorization order is nothing more than a pared down version of Nelson's old list of 200 items (BW—Jun. 24 '44, p. 18). Through the spot authorization plan WPB's Office of Civilian Requirements hopes to bring production of everything on the list up to what it calls the "squeeze" level—enough for essential needs but not enough to meet full demand (BW—Jul. 8 '44, p. 5).

• **OCR's Stand**—Although Nelson's reconversion program has given OCR its biggest grant of real authority to date, OCR's chief, William Y. Elliott, joined with WPB's operating vice-chairmen in opposing it. The explanation apparently is that the other vice-chairmen persuaded Elliott that too much reconversion at this time might endanger production of the most critically short civilian items.

As another possible factor, Elliott evidently is determined to improve relations between OCR and the operating division.

## Air Entry to Spain

Deal with Franco involves more than rights for U. S. lines—a blow to those who hoped that goods would not be bartered.

Spain's agreement to give U. S. commercial airlines the right of entry involves much more than air transport considerations.

• **Needs Oil**—Generalissimo Francisco Franco is in serious need of various materials, especially oil and high-octane gasoline, which presumably he will get as part of the deal. This bargaining was an extension of the State Dept.'s recent negotiations in which Spain agreed to curtail shipment of wolfram to Germany (BW—May 20 '44, p. 114).

An airline agreement with Spain is not too important now. Army and Navy air transport commands and civilian contract services are covering every important military spot in the world. Aviation diplomacy men say the State Dept. wanted to get on talking terms with Spain's government, and aviation happened to be a handy topic of conversation as well as a good swapping item.

• **Wartime Service**—The Civil Aeronautics Board, however, expects to issue an operating permit, under the Spanish agreement to one of the established airlines, for service to commence before the war ends. The board issues permits

under international rights of entry negotiated by the State Dept.

The Spanish agreement, coming as it does before Washington has decided upon its recommendations for United Nations air policy, may strengthen the tendency toward continuance of bilateral reciprocity in international air relations.

Many partisans in world aviation policy still hope that an over-all multilateral agreement can be reached by the United Nations as a basis for subsequent bilateral agreements. This faction regards the trade with Spain as a setback to their hopes.

**Goods Swap Lamented**—The air transport industry and its friends in government had hoped, though with little optimism, that reciprocal air rights could be negotiated as such, without too much bargaining in other goods. They don't want air rights swapped for military and commercial considerations, sometimes to the disadvantage of aviation. The Spanish transaction brings them a setback on this score, too.

Conclusion of the Spanish agreement will have no particular bearing on the continuing battle between the committee of 17 airlines and Pan American Air-

ways over whether overseas transport shall be monopolized by a single American flag line (BW—Apr. 1 '44, p19)—except that one of the 17 lines (which now includes American Export) almost certainly will get the operating permit.

• **P.A.A. by Close Vote**—Pan American's battle for control of an American flag foreign airline system continues

under the personal and determined generalship of Juan Trippe. The Senate subcommittee on aviation is split on the issue and is reported to have decided, in a heated show of hands, in favor of P.A.A.—by a narrow margin. The committee's report is being withheld until Congress reconvenes; the balance could be tipped the other way in the interim.

## Back Door to Reconversion

Through appeals procedure set up by WPB, companies can—and do—obtain relief from wartime restrictions and achieve at least a partial shift to civilian production. Hardship is the test.

Many companies, big and small, have found a back door to reconversion.

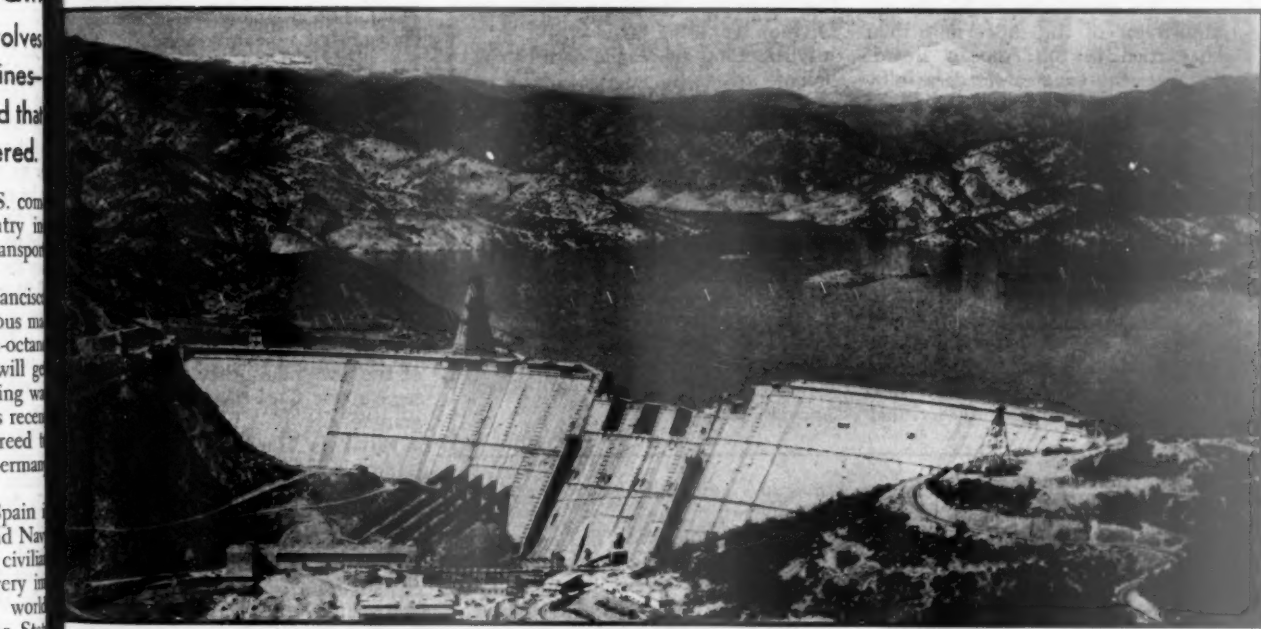
Instead of pounding on the front door, demanding more and faster reconversion, they have used the backdoor approach and won modification and relaxation of wartime restrictions through the War Production Board's established appeals procedure. The technical grounds for an appeal is hardship.

• **Court of Final Jurisdiction**—It's every man for himself. A total of 125,000 appeals filtered through WPB last year.

More than 25,000 of them reached the court of final jurisdiction—WPB's five-man Appeals Board, headed by Dr. Arthur N. Holcombe, former dean of Harvard's School of Government.

An increasingly heavy percentage of those appeals represented manufacturers' efforts to get back into (or to increase) civilian production. And a good percentage of those who made the try were successful.

• **Variety of Products**—Here is a selection of products involved in the cases



### SHASTA AT WORK

Although it's the world's second largest man-made structure, Shasta Dam officially goes to work without the fanfare befitting its stature. Ceremonies were booked for last week at this 620-ft. wall within sight of northern California's snowclad Mt. Shasta, but

were canceled because Secretary of Interior Harold Ickes couldn't be present. Three weeks before its quiet inauguration, Shasta began delivering power to Pacific Gas & Electric Co., from its two 75,000-kw. generators which will be augmented by three similar units after the war. Almost complete after four years of rush work,

the \$87,167,200 dam is an important cog in the huge Central Valley project for power, flood control, and irrigation (BW—May 13 '44, p21). Erection of Shasta, which will impound 4,500,000 acre-ft. of water, required some 6,000,000 cu. ft. of concrete—second in bulk only to the Columbia River's mammoth Grand Coulee Dam.



## WPB Observes Appeals Protocol

Almost every WPB order carries a paragraph on the steps to be taken in appealing from it. In addition, Priorities Regulation 16 (Section 944.37) lays out the general procedure to be followed in making all types of appeals. Roughly, this is the route that most appeals follow:

(1) Appeals from some 180 L (limitation) and M (conservation) orders must be filed originally with one of WPB's field offices. These offices only have authority to deny appeals (although they can recommend favorable action to Washington). As an important exception, the field office has limited authority to grant appeals from M-126, the omnibus steel order.

(2) An appeal denied by a field office may be reappealed to the individual or organization responsible for the order (in most cases, this is the administrator of the order). Appeals from L and M orders over which the field does not have jurisdiction also customarily began with the administrator of the order.

(3) An appeal denied by the administrator of the order may then be carried to the Appeals Board, which is the court of final jurisdiction. Some appeals reach the board more circuitously, being routed first from the administrator of the order to the division chief responsible for the product, and even from the division chief to the WPB vice-chairman in charge of the division. Regardless of the route an appeal follows, the appellant has the right to take his case up to the Appeals Board itself.

• **Exceptions**—The important exceptions to this procedure are R (rubber) and U (utilities) orders. Final

denial on an appeal from these orders can come from the rubber director or the director of the Office of War Utilities, as the case may be. However, the Appeals Board may be—and sometimes is—called in by these two offices to hand down decisions in tricky cases.

The Appeals Board also has no jurisdiction over requests for "reconsideration" of unfavorable action by WPB on applications for authorizations, preference ratings, allocations, and the like. In theory, the distinction between an appeal and a request for reconsideration is that one is taken from a prohibitive order, the other from a permissive order.

By way of example, order L-23-C says that after July 1, 1944, nobody shall make a domestic cooking or heating stove except to the extent authorized by WPB. The order contemplates that manufacture of stoves will be permitted. If a request for authorization to make stoves was turned down, a company could then ask for a reconsideration, but the "no" of WPB's Plumbing & Heating Division would be final.

• **Distinction Is Vague**—The total volume of such requests probably runs to more than the total volume of appeals. While the distinction between the two may be clear in theory, it doesn't always work out in practice. The procedure followed often depends more or less arbitrarily on how an order is written. Thus, the aluminum order is so phrased that almost all appeals from it must take the form of requests for reconsideration. Actually, as with appeals from R and U orders, a good many such requests finally end up with the Appeals Board.

handled by the board during a single day recently: chrome-framed mirrors, coffee urns, spiral binding wire, mailing tubes for X-ray films, metal mess trays, coffee and percolator filters, milk pails, incinerators, link fence, culvert pipes, combination ranges, rotary cookers, steelplated parts for alarm clocks, union dues buttons of metal, metal lipstick containers, and hand lawn mowers.

In the early days of the war, appeals officials had a rubber stamp for "no," and it worked overtime. Today, a well-founded appeal has a better than even chance of being granted.

• **Only 20% Denied**—During the week ended June 17, WPB acted on 1,387 appeals from L (limitation) and M (con-

servation) orders; 1,100 were granted, 287 denied.

In the previous week, the figures were 1,000 granted, 330 denied. These figures include all appeals handled down the line in WPB as well as those reaching the Appeals Board (box, above).

WPB's increasing liberality in granting appeals as the war has swung over to the Allies illustrates the flexibility of the appeals procedure. Designed to provide the stretch in an otherwise rigid system of prohibitions and commandments, the appeals setup can turn on a dime when the need arises in spite of its necessarily cumbersome stratification.

• **Availability Controls**—As steel, aluminum, and other metals became easier,

appeals from the restrictions on their use were granted more readily. As lumber, containers, paper, and textiles tightened up, the appeals procedure tightened, too. An appeal which was denied six months ago might, in the light of changing conditions, be granted if presented again today. (An appeal can be resubmitted.)

The board's procedure on experimental models is a good example of the way in which it acts as a trial balloon for WPB. Requests for permission to make models have been coming in for more than a year, but the board did not begin granting them until about six months ago.

In April, WPB issued an order lifting the ban on the use of aluminum in experimental models. Copper and brass interests protested. The board held hearings and has since been granting appeals to use these metals as well as aluminum. Now, as part of Donald Nelson's four-point reconversion program (BW-July 15 '44, p.5), WPB is lifting restrictions on experimental models.

• **One Jump Ahead**—Essentially, the appeals problem is one of timing, and generally the appeals setup can keep one jump ahead of the formalities involved in rescinding or relaxing a WPB order. The company which makes judicious use of appeals may be able to stay just that far ahead of its competitors.

The importance which the Appeals Board attaches to timing is illustrated by a recent appeal for permission to manufacture talking dolls (brass reeds are used for "voices") with eyes that would open and shut (weighted with lead). The dolls were to be ready for the Christmas trade.

The board took the attitude that while denial of talking dolls with eyes that blink may not seem an unusual deprivation in the light of the state of the war today, they might very well seem so by Christmas. The appeal was granted.

• **What Is Hardship?**—WPB's definition of hardship covers many situations. The hardship may be chiefly to the appellant himself, or it may be to his labor force, or it may be to the consuming public (if he makes an essential civilian item).

Recently, the Kirsten Pipe Co. of Seattle, Wash., maker of patented aluminum-stemmed, "air-cooled" pipes, appealed for permission to resume manufacture of its product. The company had behind it a good record as a war producer. It was located in a tight labor area, but was able to show that its labor force could not now be easily diverted to war work.

The board gave the company permission to go back to making pipe for three months. (Appeals are custom-

only granted for limited periods and are later extended if conditions have not changed.) The decisive factor was the desirability of holding Kirsten's labor force together so that it might be available for any possible war contracts in the future.

• **Question of Materials**—A company which can get needed materials, parts, and components from its own (or somebody else's) idle and excess inventories has a good chance now of appealing successfully. This wasn't true in the days when nobody knew whether idle inventories might not have to be melted down for scrap to feed the war machine.

Manufacturers who have held out for rigid quota systems, for barring newcomers, and for similar restraints on competition during the reconversion period might be surprised at the breadth of the Appeals Board's powers.

Most of the appeals the board grants have to do with restricted rather than prohibited products. An example of a restricted product is a lipstick container which can be made, but not of brass, steel, etc. In the prohibited category are washing machines, mechanical refrigerators, and automobiles, which cannot be made in any quantity or of any material. But when circumstances warrant it, the board has the power to permit one manufacturer to make a prohibited product even though his competitors may be frozen out, or even though he may be a newcomer to the field.

• **Decentralizing**—Much of the load will be lifted from the Washington appeals setup Aug. 15 when WPB's new spot authorization order gives field offices power to set aside L and M orders (page 15). And the board will dwindle correspondingly in importance. But it will still have final authority over many provisions of the orders and over all products requiring critical components and precision parts.

Part of the Appeals Board's effectiveness as WPB's safety valve lies in the ease with which mild-mannered, scholarly Dr. Holcombe has avoided the legal paraphernalia and courtroom atmosphere which might be expected to accompany such proceedings.

• **Hearings Are Informal**—A full-dress hearing before the board is an informal affair with no evidence under oath. An appellant may bring his lawyer, but he can generally argue his case better himself. Small businessmen who can't manage a trip to Washington are as likely to get a favorable decision on the basis of a case submitted in writing as the big fellow may get from a full hearing.

There is one important check on the ease which a company can make of the appeals procedure: In an important case,

all sides are given a hearing, and an appellant's competitors may have their say. Government agencies frequently crop up in hearings. The Office of Civilian Requirements may throw its weight for the granting of an appeal to manufacture a needed civilian item. Smaller War Plants Corp. has found in the appeals procedure a handy means for improving the status of the little fellow.

## Detroit Is Wary

**Auto makers' willingness to delay reconversion reveals good politics. Behind the scenes they move toward their goal.**

On Friday of last week, top executives of nine automobile manufacturing companies held their second meeting to discuss the problems of reconversion with officials of the War Production Board.

• **A Shocker**—Expectation was general that the meeting would conclude with a complete set of blueprints for the change-over. The eagerness to resume production which the manufacturers had manifested in their first meeting (BW—Jul.8'44,p24) and the sympathetic ear which WPB was inclined to

give them encouraged a belief that at the end of last week's meeting specific quotas and dates of production might even be announced.

Consequently, it was something of a shock when Saturday morning's newspapers headlined the fact that the auto manufacturers had told WPB that they were too busy with war production to consider reconversion now.

• **Two Reasons**—Actually, the unanimous statement which the auto men made to WPB and released to the press reflected two common-sense and persuasive points of view:

(1) The industry doesn't want to be put in a position where the public might feel that it was prepared to abandon war goods production overnight in order to get back into peacetime operation.

(2) On the basis of the competitive situation within the industry, the manufacturers were unwilling at this time to have their hand forced by WPB and to reveal to each other any details of their automotive production plans.

• **Progress on Tools**—Despite the public statement, a fair amount of progress was made by the industry in its discussions with WPB—particularly with respect to such important matters as obtaining the necessary machine tools.

The one big problem which was left unsolved at the end of the meeting was the extent of the control which WPB

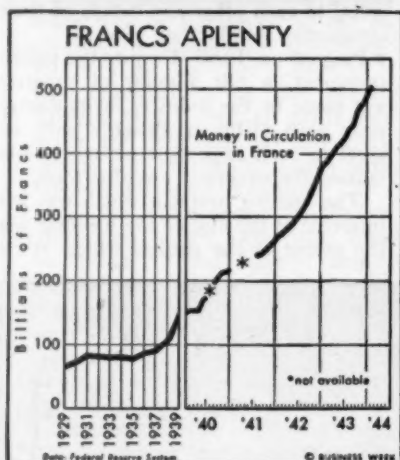


## PILEUP IN GRAIN

With grain piled in its streets, Panhandle, Tex., presents a sight now common to farm areas of Texas, Oklahoma, and Kansas, as bumper wheat crops (BW—Jun.17'44,p19) collide with manpower and transport shortages. Such outdoor storage piles range to 15 ft. high and 800 ft. long, holding an aggregate of more than

22,000,000 bu. That's equal to all the elevator space in the Texas Panhandle. With some railroads able to divert only 10% of their normal car tonnage from war shipments, German prisoners are doing emergency unloading at Amarillo, Tex., to speed the turnarounds. Texas farmers will count an average wheat return of about \$4,000 as their share of 1944's booming farm income (BW—Jul.15'44,p17).





will exercise in the reconversion process once the green light is given. The auto men felt that all WPB should do would be to set quotas and starting dates. But the WPB officials felt that they ought to regulate the flow of materials to the industry through the operation of some such program as the Controlled Materials Plan.

The auto people considered any such program utterly superfluous, and they emphatically rejected WPB's "junior priorities" system (BW-Jul.1'44,p28), also known as the "blue order" plan.

● **Can't Anticipate Demand**—This proposal provided for placing parts orders now, for establishing a quasipriority rating on them, and for release of the parts when manpower and materials permitted. Auto men voted against the plan on the argument that it would tighten manpower during the war and eliminate work in the reconversion period when it will be needed; and that parts schedules cannot be set before market demands, price levels, and—most

Since France fell in June, 1940, franc circulation has expanded more than threefold, chiefly as a result of colossal German occupation charges. On top of this, Allied armies in Normandy are using part of an 80-billion-franc occupation issue. French workers sorting supplies near the beachhead (above) are paid in either occupation francs or with notes purchased locally with American dollars. Czechs, Poles, Italians, and Russians—captured remnants of the German Todt organization—will soon go to work for the Allied armies fighting in France.

important—the final form of products to be made is determined.

Perhaps beyond that position, the auto people also feared that setting up controls over ordering now would lead to divulging of competitive information later on.

● **Models Shrugged Off**—The auto men heard details of the WPB order, effective July 22, permitting experimental model building. Inside the meeting and out, they shrugged and reported lack of technical help to do such work while war output continues heavy.

But nobody was fooled by this cultivated indifference. Actually, while the auto people sat in Washington, Detroit reports persisted that development programs were under way, in line with the pilot model order. It was said that some experimental material requisitions were placed early this month anticipating the effective date of the order.

● **Tool Estimate Questioned**—Tool buying will dovetail with product planning. WPB's vice-chairman, L. R. Boulware,

said after the meeting that the auto industry needs 8,000 machine tools to reconvert. General Motors, it was reported later, needs half that number.

The small total for the industry was a surprise. Perplexity was increased by Boulware's statement that the auto firms would be able to use 75% of the Defense Plant Corp. machines in their plants which will become idle after Germany falls. Industry people believe the total will be 20% or so at the outside, under favorable buying conditions.

In any case, the auto plants will start filling tool needs at once. WPB promised priority aid if bottlenecks cannot be smashed without assistance.

● **Quota Talk Hushed**—Discussion also ensued over production quotas to become effective after the end of the European phase of the war. Neither the companies nor WPB wanted to say much about this, in fear of increasing popular belief that the war's end may be near.

WPB's proposals for car production quotas represented a cross between the board's ideas on logical volume and the companies' own "practical minimums." The total evidently was around 2,150,000. With one exception—one of the smallest companies—the tentative WPB figures seemed acceptable, although they are still subject to change and may be enlarged.

● **Uniform Date Debated**—Meanwhile, WPB is being urged to authorize all companies to resume civilian production on an identical date, giving them free rein to handle car output along with continuing war works by any means possible. The auto companies feel that by the time Germany falls and limited reconversion is permitted, all firms will be able to dig up production facilities.

However, WPB still leans toward the idea of releasing individual companies as their war contract situations permit. Final decision on this problem will be made later.

## CONTAINERS ARE TIGHT

Seriousness of the shortage of corrugated and solid fiber shipping containers was underlined this week by a War Production Board report on their distribution by type of priority held by the user.

During May only 3.2% of the entire supply was delivered on ratings of AA-4 or less, while 33.5% went to holders of the two highest priorities—AAA and AA-1.

Here are the pertinent figures:

	Preference Rating			
	AAA and AA-1	AA-2X and AA-2	AA-3	AA-4 and Under
July, 1943...	15.2%	19.2%	28.9%	36.7%
Feb., 1944...	17.1%	21.6%	30.7%	30.6%
May, 1944...	33.5%	45.6%	17.7%	3.2%

# C.E.D. Speaks Up

Leaders appraise group's progress and chart its future. Defeatism is being replaced by plans for expanded business.

Single purpose of the Committee for Economic Development ever since its public bow 18 months ago (Report to Executives; BW—Jan. 2'43, p27) has been to aid the two million U. S. enterprises in making bold, smart plans so that this country will achieve an expansion of business to avoid a major and continued postwar slump in employment.

● **Smartness and Boldness**—To impart boldness and smartness is the function of the Field Development Division, which with evangelistic fervor rivaling the late Billy Sunday's has enrolled the states, districts, and communities as C.E.D. subunits.

To contribute toward an environment favorable to an expanding economy, the Research Division has been delving into assorted economic subjects that bear directly upon the problems of maintaining postwar business activity and national income at a high level.

● **Pleased with Results**—Last week Paul G. Hoffman, C.E.D. chairman, William Benton, vice-chairman, and other national officers met in Chicago with 200-odd state, district, and outstanding local chairmen to appraise their progress to

date and set their course for the future. Their over-all conclusions: (1) Field development has come along better than the original group dared hope. (2) Research, while proceeding with the exasperating deliberateness of a pan newly filled with popcorn, is now at the stage where the kernels will soon begin popping all over the place.

● **No Illusions**—The shrewd businessmen who founded C.E.D. had no illusions that overnight they could change the postwar prospect for American business.

When they encounter skepticism about the practical values of their intensive postwar planning, they use a standard rebuttal. They point out that the almost uniform expectation of American businessmen in the summer of 1942 was for a postwar depression that would make the early thirties "look like a picnic."

● **Economic Defeatism Routed**—Workers held the same belief and seemed committed to a program of getting everything they could while the getting was good, in hopes of laying away enough to carry them through what they considered the inevitably long period of unemployment.

Certainly that general attitude of economic defeatism has changed. Both the employers and the employees have thus received a definite boost in morale that must at least be helpful in winning the war, regardless of its eventual value in staving off a depression.

● **Psychology Plus**—C.E.D. does not claim that this improvement in outlook is its singlehanded achievement. But it believes that its thousands of committeemen battling in their home towns have contributed greatly. Quite as important, large numbers of businessmen who have been reached by its program are planning to operate their own enterprises not for a postwar depression but rather for a postwar economy of expanded business services. This improvement, it is argued by C.E.D., means that the actual business prospect has changed for the better.

In the course of C.E.D.'s activities, Hoffman and Benton, and other leaders, such as M. B. Folsom of Eastman Kodak Co., and Ralph E. Flanders of Jones & Lamson, have gained national stature as business prophets. With the spadework largely completed, the organization is trying in each locality to become personified in the public mind by its local leaders.

● **One Prospect in Ten**—Although C.E.D. talks about the 2,000,000 American enterprises, it recognizes that only 200,000 units employ eight or more people. It believes that if these 200,000 concerns can be enlisted, they will set the tempo for the entire 2,000,000.



## MILITARY ACADEMY

Executives and representatives of 300 San Francisco war contractors go to school to learn the intricacies of contract termination. Offered jointly by the Army, Navy, and Maritime Commission, the four-day course last week was the most extensive of its kind to date. Like similar classes taught by the Army Service Forces at Chicago and other big war production cities (BW—Feb. 12'44, p17), the San Francisco curriculum included case studies in terminations, claims disposals, and distribution of surplus materials.

At work in this country, with varying degrees of enthusiasm and effectiveness, are between 30,000 and 40,000 C.E.D. local committeemen. Thus, on the average, a committeeman has only four or five prospects to convert. By mathematical chance, any businessman employing eight or more people is, therefore, likely to get a real working-over by his neighbor from down the street.

● **Good, Fair, Indifferent**—The nationwide C.E.D. network has just under 2,000 local committees. Nobody knows how many of these are really result-getters. Best rule-of-thumb index of a working committee is whether it has a paid secretary; roughly one-third, or about 600, have this paid executive. A horseback guess about most of the other two-thirds is that careful grading might split them about 50-50 as moderately good and generally ineffective.

Principal obstacle to a really vital organization is the natural skepticism of existing organizations toward the need for a new and temporary body to cope with this specialized problem.

● **Dual Approach**—To provide tools with which the businessman can work,



Keynoting the progress report made by the Committee for Economic Development in Chicago last week is Paul G. Hoffman, C.E.D. chairman and president of Studebaker Corp.

C.E.D. goes at it from two directions. The field development group has 17 national "action" committees of specialists in various fields germane to the end-problem. These include such subjects as management engineering (headed by Edwin G. Booz), advertising (L. D. H. Weld), manufacturing (T. V. Houser of Sears, Roebuck), products and design (G. F. Nordenholt of Product Engineering), and marketing (T. G. Macgowan of Firestone).

These committees develop such helps as manuals, outlines, and soundslide presentations to help the businessman in doing the careful step-by-step job that planning his postwar salvation requires. • **Thorough Program**—The Research Division has an even more ambitious program. To the outside eye, C.E.D.'s research projects have moved like glaciers. But the apparent lack of action has been because each project has been gone over again and again to assure thoroughness and accuracy.

At the Chicago meeting, delegates were shown that the first concrete result—Harold Groves' preliminary report on "Production, Jobs, and Taxes" published last month by McGraw-Hill Book Co.—passed through 15 major steps, including five drafts, before its release. A. D. H. Kaplan's "The Liquidation of War Production," was published last week, also by McGraw-Hill.

• **More Reports Due**—Other projects of the 17 in various stages of completion include J. M. Clark's "demobilization of wartime controls," expected to be ready for final reading on Aug. 15; Chas. C. Abbott's "financing industry during the transition from war to peace;" and Robert R. Nathan's "manpower demobilization and reemployment."

## Problem Child

San Francisco has a new plan to solve its Hetch Hetchy power system troubles. Lease of P. G. & E. lines is suggested.

San Francisco's \$100,000,000 problem child—the municipally owned Hetch Hetchy hydroelectric power system—is headed for trouble again.

Secretary of the Interior Harold L. Ickes, who is Hetch Hetchy's guardian (the project is on federal lands), is determined that the system shall distribute its power through publicly owned lines. He has a U. S. Supreme Court decision to fortify his position.

• **There Is a Catch**—But it will take more than Ickes' determination to put his plan over. The only power distribution facilities in San Francisco are owned by Pacific Gas & Electric Co., and on nine separate occasions the city's voters have rejected bond issues for purchasing the utility's distribution system.

For these reasons the city for years leased Hetch Hetchy power to P.G.&E. for \$2,400,000 annually—a neat contribution to the municipal budget—until Ickes stepped in. After the lease was held in violation of the Raker Act (BW—Apr. 27 '40, p16), the city was granted several reprieves to continue the contract until a new arrangement could be worked out.

• **New Scheme**—Faced with Ickes' persistent demands, San Francisco authorities have suggested a new plan which may turn into a quasipublic-ownership distribution that will satisfy him.

E. J. Cahill, municipal utilities manager, has proposed to Mayor Roger D. Latham that instead of selling power to the utility company, San Francisco should lease P.G.&E. facilities to distribute Hetch Hetchy power and also buy 60% to 70% of the company's output to supplement that supply. This plan will be submitted to Ickes.

Reason for San Francisco's anxiety about the problem right now is the fact that the city may lose its present customer for Hetch Hetchy power. When war came the 88,000 kw. power output was switched from P.G.&E. to the Defense Plant Corp.'s aluminum plant at Riverbank, Calif.

• **Back to the Courts?**—Now that the country is piling up a surplus of aluminum, and cutbacks and shutdowns are becoming prevalent, San Francisco doesn't want to be caught short if the aluminum contract at Riverbank should be canceled suddenly. If a solution isn't found by that time, San Francisco won't be surprised if Hetch Hetchy turns up in the courts again.

## Tight Formation

Aircraft industry shows a united front in presenting its postwar ideas to legislators. Wilson leads for Aero Chamber.

America's biggest war industry has now put its postwar thinking on the record. In doing so, it has probably chalked up a record for its own annals. For old timers claim that last week's appearance of representatives of the principal divisions of the aircraft industry before the subcommittee on war contracts of the Senate Military Affairs Committee marked the first occasion on which this industry has taken a concerted stand on an important issue.

Credit for this unity, which still awaits the test of postwar competition, goes to the industry leaders who recently reorganized the Aeronautical Chamber of Commerce of America for a cooperative start on a brand-new chapter in its checkered history.

• **Four Fundamentals**—The Senate subcommittee, considering legislative angles of aircraft industry reconversion and postwar aviation policy, listened to a program based on four fundamental principles. These were outlined for the Aeronautical Chamber by Eugene E. Wilson (see cover), vice-chairman of United Aircraft Corp. and chairman of the Chamber's board of governors. They emphasized this country's postwar need of:

(1) Air forces of such strength and



Satisfied with their past achievements and confident of the future, some 200 regional leaders of the Committee for Economic Development dine at Chicago.



"Unforeseen events . . . need not change and shape the course of man's affairs"



## CALLING CARD

THE YANK who hurls this death-laden grenade is calling at an Axis strong point. It's a different—very different—kind of a call from the ones he used to make . . .

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doing a real job. Those ineligible for military service are taking on double work to serve you. They are selling—and buying—War Bonds. Giving to the blood bank. Willingly and cheerfully they are backing every drive, every call of the Government.

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in such readiness as to preclude a successful assault on the United States or its possessions.

(2) Acquisition and maintenance of air bases essential to security and overseas trade.

(3) Orderly and economic expansion of domestic and international air transport and private flying.

(4) A strong aircraft industry as necessary to the first three.

• **Navy to Industry**—Wilson, who introduced the aircraft industry's testimony before the committee, became the Aero Chamber's chief pilot when, a few months ago, he was elevated from the presidency of United Aircraft to his present post in that company so that he could devote his full time to postwar planning. When he talks about war flying it is against a background of naval aviation. He was chief of the engine section of the Navy's Bureau of Aeronautics from 1924 to 1926 and of its design section during 1926 and 1927. As a naval aviator in his own right, he served with the Aircraft Squadrons, Scouting Fleet and as chief of staff of the Aircraft Squadrons, Battle Fleet.

In 1930 Wilson resigned from the Navy with the rank of commander and went into industry. His career in the United Aircraft family of companies began with the presidency of Hamilton Standard Propeller Corp., and he served successively as president of Sikorsky Aircraft Corp. and Chance Vought Corp. In 1937, he was made senior vice-president of United, in 1940 he was elected president, and last November he moved to the vice-chairmanship.

• **Dividing the Job**—During the hearings, the Senate subcommittee got a detailed view of the aircraft industry's ideas as to the proper demarcation between government and private development work which boiled down to the contention that private industry, working under competitive incentives, can outperform government-owned facilities to a marked degree. Commenting on the desirable division of government and private activities in the vital field of aviation research, J. Carleton Ward, president of Fairchild Engine & Aircraft Co., emphasized three points:

(1) Fundamental research, not applicable to specific projects can best be fostered and accomplished in government laboratories.

(2) The special application of research to particular designs or projects is the legitimate function of private industry working under the stimulus of competition and likely to come up more ideas than a regimented industry would (than Germany's regimented industry has).

(3) The evaluation of the results of private developments can best be made

by the impartial examination of the armed services through such facilities as those provided at Wright Field, Eglin Field, the Naval Aircraft Factory, and the Navy evaluation centers.

• **The Whole Story**—In getting the whole industry story on the record, the Senate subcommittee also listened to a discussion of the relationship of personal plane ownership to over-all air power policy by Joseph T. Geuting, Jr., vice-president of General Aircraft, manufacturer of the Skyfarer plane, and to a presentation of the problems of light aircraft manufacture by J. Henry Berner, president of Engineering & Research Corp., maker of the Ercoupe.

Nub of the reconversion warning on which the senators found their guests united was the statement of Harry Woodhead, president of Consolidated-Vultee, that the postwar retention of a strong nucleus of aircraft industry management, technology, and manufacturing facilities is essential to the security and service of the American people.

## Meat Rate Row

Coast packers gird for battle against ICC examiner's proposal to cut freight rates on east-west meat hauls.

Draw a line on the map between Butte, Mont., and Phoenix, Ariz.

That is the line upon which the Interstate Commerce Commission is riveting its attention in the rail-rate row between midwestern and Pacific Coast meat packers (BW—Oct. 30 '43, p. 44). The midwestern packers want to move their meats across that line into the Coast market, but freight rates on fresh meat make of this ambition an idle dream.

• **Cuts Proposed**—The ICC has just received from an examiner who conducted extensive public hearings a report recommending rate reductions. Elated midwestern packers claim the proposed schedule of rates would permit them to sell more meat on the Coast, and at cheaper prices. But among Pacific packers, the report is damned as a vehicle for creation of a monopoly in meat.

Since the ponderous machinery of the ICC moves with something less than accelerated tempo, it is unlikely that either prediction will materialize very soon. Both sides are tightening their grip for a long pull.

• **Differential Protested**—What bothers midwestern packers is the rate differential as between livestock and fresh meat. For example, it costs 2½ times as much to ship dressed pork as it costs





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Courtesy of Harry Winston, Inc.

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## Voyage THAT NEVER ENDS

It was many years ago that this man—then merely an ambitious lad—set out to reach a ship's bridge. On his way up, the captain learned a great deal from books, from older hands. An apt pupil of experience, learning is still to him like a voyage that never ends. It's this knowing how to use knowledge gained through experience that keeps him on top.

It pays to look for that same quality when considering clutches or power links to connect driving and driven units of equipment you buy or build. Twin Disc Clutches and Hydraulic Drives have that sort of background in the more than 26 years the Twin Disc Clutch Company has devoted to designing and building power links for industrial application.

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to ship the hog from Omaha, Neb., to Los Angeles. But from Omaha to New York, it costs only 1½ times as much.

More specifically, dressed pork which costs the packer in Denver \$9.10 per 100 lb. must absorb a transportation cost of \$1.90 if shipped to Los Angeles. This brings total cost to \$11.20, as compared to \$10.61, the price at which the Los Angeles packer can prepare his product.

• **What Reduction Means**—Under the rate revision recommended by the commission's examiner, George J. Hall, the transportation cost would be reduced to \$1.22, and the Denver packer could get his pork into the Coast market at a cost of \$10.52, or 9¢ cheaper than his competitor on the Coast.

On the other hand, live hogs shipped from Denver to Los Angeles under existing rates cost 24¢ per 100 lb. less than California hogs, according to the ICC examiner.

The practical effect of this is to stimulate the movement of livestock to the Coast, where the Pacific packers can slaughter and dress it and collect a price for the finished product which is protected by the high freight rate on dressed meat.

• **Assessing the Blame**—Hall drew a sharp line between pork and other meats in his official declaration that dressed meats are not moving freely across the disputed boundary to the Coast. As to pork, he blamed freight rates. As to beef, veal, and lamb, he blamed economic conditions, and absolved freight rates.

But his rate recommendations apply to all meats. These range from 16¢ per 100 lb. of fresh meat for hauls of ten miles or less to \$1.66 for 2,200 mi. for packing-house products, the range is from 13¢ to \$1.41.

• **Cheaper Costs**—With the support of the transcontinental railroads, Coast packers are prepared to argue that their midwestern competitors enjoy huge advantages through cheaper feed (especially for hogs) and cheaper operating costs because of the magnitude of their business. Both producers and packers on the coast claim they will be ruined if the new rates are promulgated by ICC.

## FLORIDA PAYS OFF

The State of Florida has given final approval to the payment of its \$50,000 oil discovery reward to Humble Oil Co. for bringing in the state's first commercial well (BW—May 27 '44, p. 34). Humble, which will get free oil leases on 40,000 acres of Florida land, previously announced that it will divide the reward between the state's university and the Florida State College for Women.



## THROUGH THE DARKEST HOUR

The railroads are part and parcel of the vital service of supply on which fighting men depend. They know first-hand the darkness of the hour before the dawn. • They follow the progress of the war by the nature and urgency of the burdens they carry—burdens that never lighten through the whole 24 hours of the day. • So through sunshine and shadow, railroad men serve the needs of war. Short on help, short on time, they know the value of every hour and every car. They know that a fighting nation counts on them to deliver the goods that Victory is made of—and doggedly, devotedly, they are sticking to that job. • Some day the dark hour will be behind us. Then our nation will look back and judge our fiber as a people on the courage and the will with which we faced it. • The railroads are working now so that when that day dawns they can, in clear knowledge of a job faithfully discharged, look forward with confidence to finer things to come.



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## Coal Deficit Cut

Solid Fuel's new figures aren't quite so gloomy, but the agency has a big job balancing grades and distribution.

Solid Fuels Administration for War turned down the heat on its long-standing predictions of a disastrous shortage of bituminous coal next winter when it publicly cut its anticipated deficit from 30,000,000 tons to 16,000,000 tons last week.

• **May Be Less**—Privately, SFAW is on record as anticipating a shortage of only 10,000,000 tons, for Deputy Administrator C. J. Potter told the Truman committee recently that production would be 616,000,000 tons (BW-Jul.15'44,p5), rather than the 610,000,000 tons announced last week.

His report to the Truman committee was shrouded in secrecy—at Potter's request—lest those industrial users who have been purchasing low-grade coal at SFAW's urgent request halt their buying in anticipation of a relatively easy supply next winter. A keystone of SFAW's policy has been to encourage the widest possible use of poor coals, which many industrial users normally would scorn, since without orders, producers of the poorer grades would shut down, and production would be lost at a time when every ton is vital.

• **No Change in Anthracite**—SFAW's latest compilation made no change in the anticipated anthracite deficit of 5,000,000 tons.

Solid Fuels originally saw a 20,000,000-ton deficit for bituminous, with

production not exceeding 596,000,000 tons and demands totaling 616,000,000. Some time ago, when claimants presented all their demands, it boosted the deficit to 30,000,000 tons on the basis of requirements totaling 626,000,000 tons, while Chairman Donald Nelson of WPB publicly anticipated a shortage of 40,000,000 tons or more.

• **Not Hopeful**—SFAW's recent public announcement of production of 610,000,000 tons, and its private estimate of 616,000,000 tons brings the agency more closely into line with the contentions of the coal industry, which has disagreed with SFAW's figures throughout.

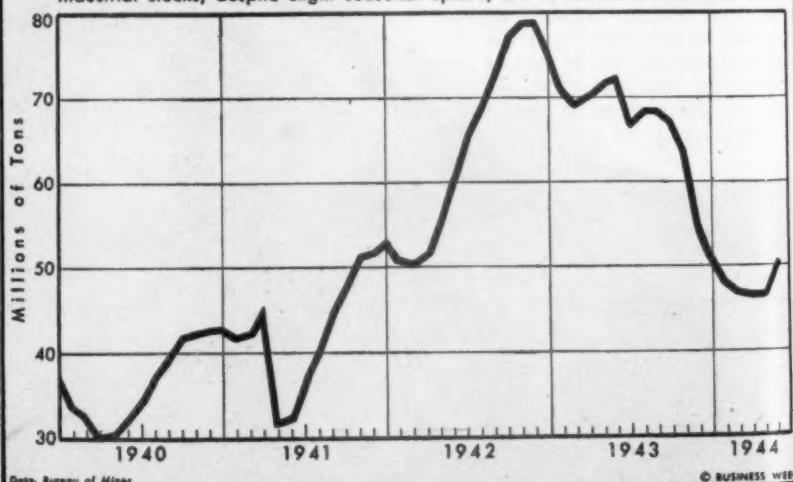
It also brings SFAW's predictions more into line with its own production figures for the year to date which show an average weekly output during the first 26 weeks of 1944 of 12,355,000 tons. This, over 50 weeks, would yield 617,750,000 tons, but SFAW has never been hopeful of maintaining this high average during the second half year.

• **Will They Work?**—Of considerable interest in the next several weeks will be the extent to which miners stay in the pits rather than take the two-week paid vacation they won only recently. If they stay at work for 52 weeks and thus add another 24,710,000 tons to the year's output, the problem will be one of moving the coal rather than getting enough.

SFAW Administrator Harold L. Ickes has revealed that 4,860 men under 26 were deferred from military service for work in the bituminous coal industry. Potter had told the Truman committee that it had every hope of getting many of these deferments continued when they expire next month. Manpower losses in the industry aver-

## THAT DWINDLING COAL PILE

Industrial stocks, despite slight seasonal upturn, are at lowest level since 1941



aged 4,000 monthly during March and April, and refusal of further deferments could disrupt present production estimates.

● **Problem of Balance**—When and if SFAW solves the over-all bituminous coal supply problem, it will still be confronted with the question of how to balance increasing demands and the decreasing supply of high-grade coal from District 7 and District 8 (Virginia, eastern Kentucky, southern West Virginia, northern Tennessee, and a small section of Georgia).

Production of this type coal is estimated at 180,000,000 tons during the coal year ending next Mar. 31. Requirements are estimated at 195,000,000 tons, with retail dealers taking 60,000,000 tons; byproduct and coke users 42,000,000 tons; industrial users, including electric utilities, 57,000,000 tons; and railroads and export users 36,000,000 tons.

● **Some Diversion**—SFAW already is diverting some from utilities, which had an average of 83 days' supply of all types on hand June 1, and from railroads, and it is preparing to limit to 90% of last year's deliveries the amount which may go to retail dealers this year.

These two measures could cut the estimated deficit to only 6,000,000 tons, but they will not balance supply and demand as now estimated.

The apparent solution—cutting domestic use of this supercoal by a second 6,000,000 tons, on the theory that home furnaces do not need the quality fuels required for specially designed industrial combustion equipment—is not an attractive possibility.

If homeowners who normally burn District 7 or District 8 coal are to be kept warm under such a diversion, SFAW might find itself shipping Illinois coal to heat West Virginia homes left without fuel when West Virginia coal was shipped to an Illinois war plant.

● **Shipping Troubles**—The requirement that coal shipped west move on the lakes as largely as possible makes coal from District 7 and District 8 hard to get this summer.

Utilities and other plants with high-efficiency boilers are far from happy about the pressure to buy low-grade coal. For one thing, boilers designed for high-grade coal break down more quickly when fired with lesser coals.

Much of the "free coal" which SFAW wants burned is of such low quality that it just can't be used in high-efficiency plants, and time and money are wasted looking for low-grade coal which is good enough.

● **Hard to Buy**—Some electric utilities, which in normal times use varying

## THE VILLAGE SMITHY HAD ITS *Supercharger*

**SUPERCHARGING**—Does this word conjure up visions of airplanes in the stratosphere? Developed so much by the war, that use, has indeed given superchargers a glamor far above ordinary blowers.

The principle of the supercharger is not new, nor limited to augmenting sub-atmospheric pressures. The Egyptians of 1500 B.C. used mechanical blowers in the form of leather bags to produce a fierce fire for metal working. The village blacksmith "supercharged" his forge with what he called a bellows.

The sole function of the bag blower, the blacksmith's bellows or the modern supercharger is to burn fuel faster by delivering air of greater density. With more fuel burned per stroke the diesel, gas, or gasoline engine generates more power. Results:—

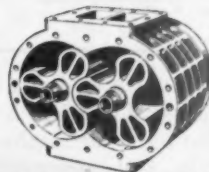
*Up high* — restores sea level power.

*On the ground* — gets more power out of an engine and enables a small engine to do the work of a larger one.

It is not too soon to ask McCulloch, pioneers in modern supercharging, to show you how supercharging can step up the power of your internal combustion engines.



*A Supercharger gives heavy trucks that extra power over the hills... that "lugging" ability for carrying heavier loads faster over any roads.*



*McCulloch's simple design of precision-fitted and sealed impellers insures efficient, service-free supercharging.*

# McCULLOCH ENGINEERING CORP.

*Milwaukee 9 Wis.*

DIVISION OF BORG-WARNER

amounts of coal each year, depending on availability of hydroelectric energy, proximity to markets, and similar factors, have still another problem. Sound operating practice led them in normal years to commit themselves to buy as little coal as possible, purchasing more when and as needed.

In wartime, with heavy demand for all possible coals, "spot buying" such as these companies normally practiced, is capricious at best, often impossible when relatively high-grade coals are required. Last winter, SFAW was forced to issue numerous directives diverting coal to such companies.

• **Problem of Oil**—Instability of the fuel oil supply also has hurt, principally in the 17 Atlantic coast states. Oil-burning power plants in District 1 (central Pennsylvania) which could possibly be shut down were refused oil when the East Coast situation got tight.

Last November, some 25 power plants, most of which were near big load centers, were allowed to use oil again. Two months later the cutoff was reinstated, and several months thereafter, oil again could be had. Now a third cutoff is rumored.

## Ice in Comeback

But demand is so great that industry can't fill needs. It is making plans to hold its sales gains after the war.

Ice manufacturers currently have their hands full trying to placate impatient customers, rush delayed deliveries, and devise rationing systems for their much-demanded product. But the same war responsible for their present woes also has restored their industry to the peak production from which it was toppled 20 years ago by the advent of mechanical refrigerators.

• **Output Jumps**—From 1942's production of 34,500,000 tons, output of the country's 6,500 ice plants has jumped to an estimated 47,000,000 tons this year, and recently the industry advisory committee informed WPB that by 1945, annual production will reach 50,000,000 tons. Capacity increased 6% last year and storage for seasonal use 34%.

But these rosy figures are small consolation to ice dealers, frantically trying to supply a huge demand resulting from several factors. Summer weather came three weeks early to some areas. High prices for fruits and vegetables have increased the demand for rail car icing. The influx of new families into war production centers has overtaken local ice plants.

• **Hard to Find**—Many an old-model mechanical home refrigerator is finally giving up the ghost—to be replaced by an "ice box" if the owner is lucky enough to find one.

Although Detroit, making 2,200 tons a day and consuming 2,700 tons has had to import ice, most serious shortage is in southern cities (BW—Jul. 15 '44, p42) where dealers have installed rationing systems to serve hospitals, homes with infants, and others with critical needs.

• **Chicago Helps Out**—Ice shipments from northern cities, begun last summer, have increased substantially. In addition to supplying local needs, for example, Chicago ice plants are currently shipping 20 to 30 cars of ice daily to points in Georgia, Tennessee, Arkansas, Mississippi, Louisiana, Alabama, Indiana, and Iowa.

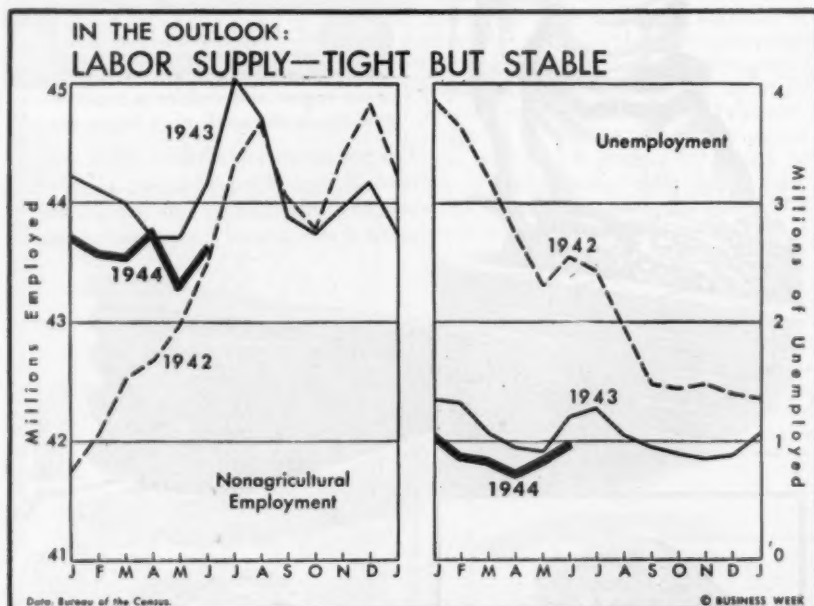
Some of this ice is destined for Army camps, which even last year could not be supplied locally. Now that southern crops have moved to market, the demand will be somewhat lightened.

Fortunately, the ice industry has lost little of its former productive capacity, even though tonnage declined substantially after the mechanical refrigerator became popular about 1925.

• **Industry Promotion**—Operators made up some of this loss by heavily promoting commercial uses, and operating in combination with related businesses like cold storage warehouses or ice cream plants. Prewar annual production (about 34,500,000 tons) was split three ways: 9,000,000 tons for domestic use, 13,000,000 for commercial use, and 12,500,000 for refrigerated trucks and railroad cars, according to Ice and Refrigeration, official organ of the National Assn. of Ice Industries.

Priorities for construction of limited quantities of ice-making machinery have been granted during the war, but neither the industry nor WPB is anxious to encourage expansion for fear of a postwar collapse. However, ice manufacturers have devised some production shortcuts.

• **How It Works**—One such stopgap, now being adopted temporarily, would increase the average plant's capacity 10% to 15%. Normal procedure is to freeze a 300-lb. or 400-lb. chunk of ice in a galvanized sheet steel can, submerged in brine. A tiny impeller keeps the water circulating so that, as it freezes from the outside, air bubbles and for-



The fact that unemployment is still hovering below 1,000,000 is clear proof that no big labor surpluses are accumulating. And, except for seasonal ups and downs, employment has declined (though not so sharply as last year)—primarily because military inductions have outrun additions of new workers, but also because some youngsters and housewives laid off from war plants that have suffered

cutbacks have quit the job market. Now that the armed forces are at peak strength and inductions will be only for replacement, the over-all labor supply is apt to stay more stable. At the moment, the summer closing of schools is freeing many youngsters for jobs in some lines, but at the same time, labor shortages are nonetheless intensifying in many industries of low pay, hard work, or high skill.



# Steel takes the Backache out of Monday

THIS is Monday in Europe. Even after the war, this age-old routine, familiar to every Continental village, must continue. Steel is too scarce and too expensive over there for most people to enjoy the household facilities that we take so much for granted.

Plentiful, low-cost steel relieves American women of drudgery--makes available to the masses the "luxuries" of running water, automatic laundry equipment, refrigerators, ranges. There is no other metal sufficiently abundant or suitable to take over this job.

For 42 years, Youngstown has helped to convert America into a nation of running water--supplying millions of miles of durable, low-cost steel pipe, fabricated by constantly improved, more efficient methods. Youngstown has also supplied steel sheets for millions of washers and tubs, ranges, refrigerators and other home equipment.

Now, war's demands for steel are being satisfied. But soon we shall resume the unfinished job of supplying you, our customers old and new, with dependable, economical pipe and sheets to further eliminate drudgery and advance the American standard of living.



**YOUNGSTOWN**  
THE YOUNGSTOWN SHEET AND TUBE COMPANY

YOUNGSTOWN, OHIO

Manufacturers of

**CARBON - ALLOY AND YOLOY STEELS**

Pipe and Tubular Products - Sheets - Plates - Conduit - Bars - Tin Plate  
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## FOR THAT *New* PRODUCT



### compact design...low weight with a **BLACK & DECKER MOTOR**

Your new product can be given these important advantages by using a Black & Decker motor because:

1. Every motor is designed to meet the requirements of a particular application.
2. Long experience has taught us where and how much motor weight can be reduced without interfering with essential electrical characteristics.

**THOROUGH  
ENGINEERING**  
is the basic factor behind the successful operation of the above de-icer pump motor and many other special application motors we have designed for all types of equipment.

3. As a result of this experience, frequently product design suggestions can be made which reduce product weight... improve compactness... better performance.

In order to realize the full benefits of special application, be sure to consider the motor in the early stages of product development.

**THE BLACK & DECKER ELECTRIC CO.**  
KENT, OHIO



# Black & Decker

FRACTIONAL HORSEPOWER **MOTORS**  
SPECIAL APPLICATION

eign matter are forced toward the center. Last step is to remove a small amount of relatively dirty water from the core, replace it with fresh water and finish freezing the block. This assures a clear chunk of ice, without air bubbles.

By eliminating this refinement (except for withdrawing the water), ice manufacturers save time, and finish with a somewhat larger block of ice with a small hollow in the center, which can be cut into the same number of 25-lb. and 50-lb. pieces.

• **Help Needed**—Major wartime hardship for the industry has been the labor shortage—Chicago, for example, could have made 600 tons more a day during the last prolonged heat wave if it had had the manpower. Labor shortage is particularly acute on the delivery routes which long ago lost the young huskies who could nonchalantly shoulder large chunks of ice. Manufacturers now look for help to the War Manpower Commission's recently inaugurated priority referral plan, under which they rate as "essential" classification.

Wartime sales of ice refrigerators (nonmechanical) augur well for the industry's postwar future. Annual sales had dropped from about 1,000,000 units in the early 1920's to 200,000 in 1942. But in 1943 WPB authorized production of 600,000, made from noncritical materials, and increased this to 800,000 in 1944.

• **Survey for Future**—The industry has no intention of relinquishing its wartime gains. The National Assn. of Ice Industries is surveying consumers to determine the type of ice refrigerator preferred, and is continuing its annual \$250,000 advertising campaign.

### TAX ON BREEDERS CLARIFIED

Livestock used for draft, breeding, or dairy purposes have been ruled a capital asset by the Bureau of Internal Revenue and as such, profit from their sale is subject only to the capital gains tax, not to the income tax, with its stiff mounting surtax schedule.

In so ruling, the bureau has accepted the long-argued contention of livestock breeders that these three types of livestock, and particularly breeding stock, are as much a part of their producing plant as a factory is to a manufacturer in contradistinction to steers, calves, or lambs which constitute the end product, sale of which is taxable as income.

Since the section of the tax law on which the ruling was based first appeared in the revenue act of 1942, refunds of taxes already paid for 1942 and 1943 will be in order in many cases, according to a statement by the American National Live Stock Assn.



Buy War Bonds — to Have end to Hold

## Bee-lines to Berlin

A straight line—really *straight*—is one of the hardest things in the world to draw. Yet thousands of mathematically straight lines are necessary to the building of a big airplane like the Boeing Flying Fortress and the B-29 Superfortress.

The master layout drawings for every part of a bomber must be made on flat sheets of lacquered steel. To insure the accuracy of the finished drawing, the metal is first scribed with intersecting reference lines like those on a gigantic sheet of graph paper. And the lines must cross each other in perfect 10-inch squares, without deviating as much as 1/100th of an inch.

Until recently this was a slow and laborious job. Draftsmen sprawled across the big tables hour after hour, ruling in reference lines with straight-edges. But the slightest miscalculation—even the expansion of metal caused by the sun's heat—might ruin their efforts. Drawing the grid lines on master layouts for the frames and bulkheads of one model alone consumed 5600 hours.

Boeing engineers determined to change the method. They built the "Grid Machine" shown above—a simple, supremely accurate device that draws a dozen parallel straight lines while you watch. It never makes a mistake. And

it has already saved thousands of priceless hours between blueprint and bombing mission. Today the work is done in less than a tenth of the former time.

All through the Boeing plants are similar examples of ingenuity and skill applied to the task of building more airplanes faster and more economically—speeding the production that shortens the distance to Victory.

When the war is won, Boeing's abilities in design, engineering and manufacturing will again be applied to peacetime products. You can be sure of any such product... if it's "Built by Boeing" it's bound to be good.

DESIGNERS OF THE FLYING FORTRESS • THE NEW B-29 SUPERFORTRESS • THE STRATOLINER • TRANSOCEAN CLIPPERS

**BOEING**



**SHORT OF  
EXPERT MACHINISTS?**



## **Porter-Cable Wet-Belt GRINDER**

**Enables Newly Trained  
Operators to do accu-  
rate Machining Faster!**

With this new Wet-Abrasive-Belt, solid areas, flanges, bosses, interrupted sections, can be surfaced with one application to the belt—freehand or with simple jigs—slashing “make ready” time, simplifying manufacture, cutting cost. Effective coolants do away with frictional heat, distortion, discoloring, thus reducing rejects.

Wet-Belt Surfacing is amazingly fast—often 5 to 25 times faster than previous methods. With micrometer-stop table, semi-skilled operators can take fine cuts with uniform precision.

Wet-Belt Surfacing works equally well on hard or soft metals, glass, ceramics, plastics. Before investing in tools that new materials may make obsolete, look into Wet-Belt Surfacing. Send today for two copies of our new booklet—be sure one gets to your production manager.



This Book gives you complete information on one of the most important machining developments to come out in years.

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MACHINE CO.**

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## **Trucks Slipping**

Output of heavy units in June dropped 22% below goal. Manpower shortage in castings industry is the main barrier.

Truck production, No. 1 problem of the 1944 war production program, is slipping. After holding up to anticipations during the first quarter, it has steadily lost ground since then, measured against enlarging schedules. The outlook is not optimistic, even though trucks have been given highest possible manufacturing priorities.

• **Army Reduces Quota**—Originally about 1,000,000 trucks were projected for 1944 manufacturing (BW—Jan. 29 '44, p. 36), of which 123,492 would be of civilian types, with 81,366 assigned to commercial use in this country. The latter totals were later increased to about 131,000 and 88,000, but no definite announcement was ever made.

Then the Army cut back its requirements from 742,433 to 619,284 (BW—Mar. 26 '44, p. 26), reducing the over-all 1944 authorization to around 750,000 units. Today, however, industry anticipations are that 700,000 units will likely be the top level which the industry can achieve this year, and 600,000

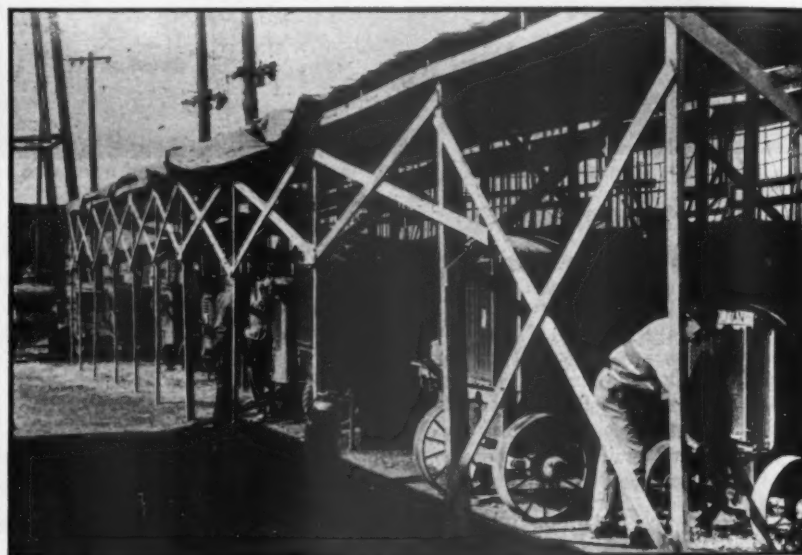
would not be in the least surprising. • **Output Schedule**—Of the 131,000 scheduled civilian-type assemblies, projections called for about 37,000 units of production during the first half of 1944, then 45,000 in the third quarter, and 49,000 in the last quarter. First half output was about on schedule, but it included few heavy trucks. Third quarter anticipations are pessimistic, and so is the fourth quarter outlook, although some relief may manifest itself by then in the castings picture.

Castings constitute the barrier to achievement of the schedule (BW—May 13 '44, p. 36). Little hope is held for production gains in the foundries during the heat of summer, despite the government drive to enlarge employment in that industry.

• **Tires Short, Too**—And should the castings problem be solved, shortages of truck tires will be encountered. Truck tires, requiring a proportion of natural crude and experienced manpower, would constitute an even greater problem if truck output reached projected levels. Akron holds little hope of enlarged truck tire production without more skilled men to do the job.

The shortage of cast parts hits the truck industry in its tenderest spot, the heavy vehicle field, running from 24 tons up to 45-ton behemoths.

• **Manpower Troubles**—The reason is simple. Light and medium truck makers



## **PINCH-HITTING PUMPS**

Mobile air compressors in a temporary lean-to are maintaining capacity war production at the American Central Mfg. Corp., Connersville, Ind. The gas-driven construction equipment is pinch-hitting for a big electric

motor which burned out recently, slashing output of jeep bodies 50%. Aided by the Army and Office of Defense Transportation, the firm assembled 15 emergency compressors within four days. Repairs to the motor, which drives permanent air machinery, will require about three weeks.

# ENGINEER NOW... FOR MINIMUM MAINTENANCE AFTER THE WAR

Down-time for repairs! Skilled labor standing idle! Valuable manpower diverted to unproductive maintenance! They're serious problems today, but they'll be worse when war contracts vanish and you're fighting hard for every order.

Insure  
Longer Bearing  
Life with

**ROLLWAY**  
Right-Angled Loading

Type T  
Thrust

Type MUC  
Radial



... *So start today.* Engineer both *your product* and *your production machines* for minimum maintenance. Check every bearing ... its life expectancy ... the average number of hours lost through servicing and replacement ... the ruggedness and compactness of the housing ... and the power that could be saved through high-efficiency bearings. Then consider how Rollway's Right-Angled Loading would help you.

## Right-Angled Loading Reduces the Unit Load

The advantages of Rollway's basic bearing principle can be seen at a glance: Every radial load is carried at right angles to the roller axis. Every thrust load is carried at right angles to the axis of a separate set of rollers. That means the total load is split into two simple components. The unit load per roller is lower. There are no oblique resultants tending to pinch the rollers out from between the races. Roller-end wear-back is reduced. Rubbing or sliding friction is practically eliminated. Starting torque is lower. Bearing life is longer. And the end result is a noticeable reduction in maintenance.

## LET US HELP YOU SELECT THE PROPER BEARINGS FOR YOUR NEEDS

The life of a bearing is not measured entirely by its size, material or precision workmanship. Suitability for the work is an important factor. Let our engineers help you select from the wide range of SAE and American Standard metric sizes. Just send a drawing or detailed description for confidential analysis and recommendation. No charge or obligation.

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BEARING COMPANY, INC., SYRACUSE, NEW YORK

BUILDING HEAVY-DUTY BEARINGS SINCE 1908

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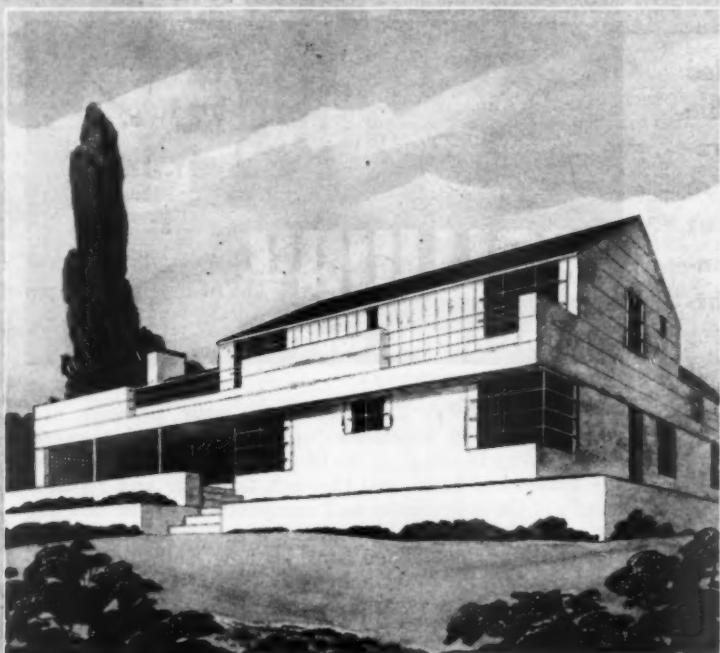
# FLUID TRANSPORT

## *Specialists*

### THE PLUMBER AND GRINNELL



America depends upon the plumber to install heating and plumbing systems. Upon his skill depends the comfort and sanitation of America's homes. His is a job of **FLUID TRANSPORT**.



The plumber depends upon Grinnell to provide the engineering, manufacturing and distribution of the materials he needs to assemble a complete piping system.

Grinnell products include pipe and tube fittings, pre-engineered pipe hangers, prefabricated piping, automatic sprinkler fire protection systems and humidification systems. As specialists in piping, Grinnell maintains complete stocks of piping materials in principal cities.

**GRINNELL COMPANY, INC.**

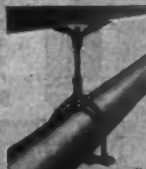
Executive Offices, Providence 1, R. I. Branch Offices in Principal Cities



PIPE FITTINGS

# GRINNELL

WHENEVER *Piping* IS INVOLVED



PIPE HANGERS

are largely volume producers, with foundries in their own plants, and their work is highly mechanized. Furthermore, these plants did not need any more men on foundry payrolls than they had when war began.

But the heavy truck makers never had the volume to maintain their own foundries. They bought from outside sources, and their small orders were largely job shop propositions. Now those orders are at their highest levels in history. The outside foundries, much more dependent on hand labor than captive shops, not only have had to maintain their working forces, but to increase them. They just haven't been able to do it.

• **Drastic Slump**—So heavy-truck production sank last month, according to newly released WPB figures, to a level of 22% below schedules. The total truck program's 1% decline from schedule was largely due to this precipitate drop.

This picture bodes no good for commercial truckers who have been pleading for over-the-road freight equipment. Invasion needs call for heavy trucks to replace torn up rail facilities on the continent. So the military will likely get first call on production up to the level of its needs, and little, if any, will be left for the civilian users.

WPB has rejected a plea of the Office of Defense Transportation for resumed manufacture of light trucks for civilian use in the first quarter of 1945.

• **Tank Program Hurts**—The recently enlarged tank program (page 47) will not do the truck picture any good, either. Chrysler's tank arsenal was making some truck parts at Detroit before the invasion, but now it is concentrating on tanks. Beyond that, enlarged demand for tank power plants will cut into the supply of castings otherwise available for truck engines.

## TUNA CATCH IS BIGGER

Tuna fish production is 65% better than last year, with the pack of California canneries for the first four months of 1944 totaling 509,002 cases compared with 293,598 for the same period in 1943. Biggest pack was in 1940 when 746,806 cases were packed in the first third of the year.

Canners doubt that more tuna will be available to civilians. The Army and Navy already have placed orders for about 40% of last year's pack and are expected to take more.

This year's increase is caused almost entirely by larger catches by the purse seine vessels. Bigger vessels were mostly requisitioned for war service and the fleet is below the size necessary for pre-war catches.



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IF YOU HAD **138** APPLES.

Suppose you had this pile of Winesaps—  
enough to make a full bushell!

Now, suppose you had to carry them  
from here to there. How would you do it?  
A few armloads at a time? Back and forth?  
Or would you put them in a basket and  
take them all at once?

Elementary? Sure it is! So is the basic  
economy of using Barrett Lift-trucks and  
Skids. They enable you to handle material  
as a *unit* through many steps of manufac-  
ture, instead of in small lots, or as individual  
pieces. It's so simple that its possibilities

are often overlooked by plant executives  
who seek the answers to their problems in far  
more expensive and elaborate equipment.

Be sure you don't overlook the savings  
in time and manpower that are open to you  
with Barrett Lift-trucks and Skids. A Barrett  
engineer will be glad to point out the pos-  
sibilities right in your own plant. No obli-  
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Have you seen the new  
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Barrett  
Handling  
Equipment



# Busy Waterways

Revenue ton-miles credited to barges almost doubled from 1938 to 1942, and 95% of traffic is directly war-related.

River men are hatching plans to increase the use and efficiency of the inland waterway system to take advantage of postwar trade opportunities in the highly competitive transportation field.

Lachlan Macleay, president of the Mississippi Valley Assn., is confident that the job done by barge lines in carrying war freight justifies peacetime expansion of river facilities.

● **New Equipment Discussed**—Except for the \$70,000,000 poured out by government agencies to build a flotilla of towboats, tugs, and barges that were chartered to carriers, river men had little opportunity in recent years to add to their equipment. Now they talk of triple-engine towboats of 2,400 hp. to 3,000 hp., instead of the 1,600 hp. or less of prewar days, plying the lower Mississippi in the future. Terminals also would be improved.

Another proposal to coax back the civilian traffic dislocated by the war is

the building of self-propelled barges with loading units that can be lifted onto a truck chassis and driven from the barge to the customer. A veteran barge man predicts an expansion period of 15 years before facilities will equal river traffic demand.

● **Congress May Act**—The possibility that Congress may approve waterway projects shelved by the war encourages the river interests. Topping the list is the proposal for a 9-ft. (instead of a 6-ft.) channel on the Missouri River, 800 mi. from its mouth to Sioux City, Iowa. Already approved by the House, the \$6,000,000 Missouri project faces a stiff fight this fall in the Senate where irrigation partisans, fearing that maintenance of a 9-ft. channel will hurt irrigation, are seeking prior claims to the waters (BW—Jun. 24 '44, p42).

In railroad parlance, the Missouri now is a narrow-gage line in comparison to the standard-gage 9-ft. channel maintained on 6,700 mi. of the country's inland waterways. Standard equipment thus has difficulty operating on the 6-ft. channel. Under this handicap, traffic on the Missouri has been peanuts—744,916 tons in 1942 from the mouth to Kansas City. But river enthusiasts claim—perhaps too optimistically—that this figure will zoom to a new high of 12,000,000 tons annually. River's low-cost trans-

portation, they argue, will always attract such bulk commodities as wheat, corn, and coal.

● **Mississippi Studied**—Still in the early stage is the suggestion of a 12-ft. channel on the Mississippi River. Acting under a congressional resolution, U. S. Army Engineers last month held a hearing on the feasibility of a 12-ft. channel on the Mississippi between Cairo, Ill., and Minneapolis, Minn.

The war record of Old Man River has eased the burden on railroads and highway trucks, river men declare. Plying the inland rivers at the present time are 5,000 barges, ranging in size from 100 tons to 3,000 tons, and about 1,000 towboats, ranging from 200 hp. to 2,500 hp.

● **Doing a War Job**—Although the river gave ground to speedier transportation in the hurry of moving ordnance equipment and finished products (BW—Mar. 27 '43, p20), about 95% of the water traffic consists of commodities directly related to the war. In 1942 barges achieved the sizable total of 15,339,165,000 revenue ton-miles in contrast to 8,461,127,000 in prewar 1938.

U. S. Army Engineer figures for 1938 and two war years (1943 figures have not been released) illustrate the expanding tonnage carried by the Mississippi River system, including the Ohio River system, which mirrors activities of the coal and steel industries:

	1938	1941	1942
Mississippi River system	48,558,074	86,062,809	92,147,940
Ohio River system	32,093,464	59,920,943	63,658,520
Mississippi River	12,532,860	22,820,731	28,039,800
Missouri River	497,901	764,334	744,916

In addition, approximately 1,000 military and naval vessels built at inland shipyards during 1942 and 1943 have been floated down the rivers to Gulf ports.

● **Wartime Savior**—Preliminary figures on principal commodities indicate an impressive boost in the 1943 traffic over 1942 tonnage.

A savior for the waterways, when consumer cargoes virtually vanished as a result of wartime production restrictions, was the movement of gasoline and petroleum products. From July, 1942, through March, 1944, a total of 361,062,080 bbl. of petroleum products—a daily average of 564,159 bbl.—moved over inland rivers and the Gulf Intracoastal waterway. Petroleum products accounted for 24,000,000 tons of the inland rivers' cargo in 1942, and this has been increasing since.

During 1942, 116 steel barges with a capacity of 1,339,644 bbl. were converted to oil carriers. However, realistic river men have no dreams of holding



## STRIP SITES PLANTED

Along spoil piles in the wake of coal strippings in western Illinois women plant trees to reforest land that ordinarily would go to waste. The project sponsored by coal producers is transforming devastated eyesores into orderly mounds of woodland that will ultimately pay off in timber. Going into these man-made ridges and val-

leys which cannot be economically leveled for farms are 35 species of pines and such hardwood trees as poplar, walnut and oak. The program began in 1930 and thus far 10,000,000 saplings have been set out. This year some 2,000 acres will be planted by producers of 95% of the state's open-cut coal—all of whom are pledged to reforest annually areas equal to the previous year's devastation.

There won't be any

Sharp line drawn

**W**AR industries are too big to stop at a common finish line. Peace industries are too big to resume at a common starting line.

There may be months of overlapping schedules even in a single plant! Certainly no single V Day for all manufacturers together.

When you reconvert it will be your decision—what you will make, and *when* you will make it.

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**BULLETIN CM-43**

"Multiple Spindle Chucking Automatics"

**BULLETIN CM-44**

"How Costs Were Cut on 25 Chucking Jobs"

**CATALOG D-42-B**

Automatic Dies, Collapsible Taps and Hollow Mill Heads

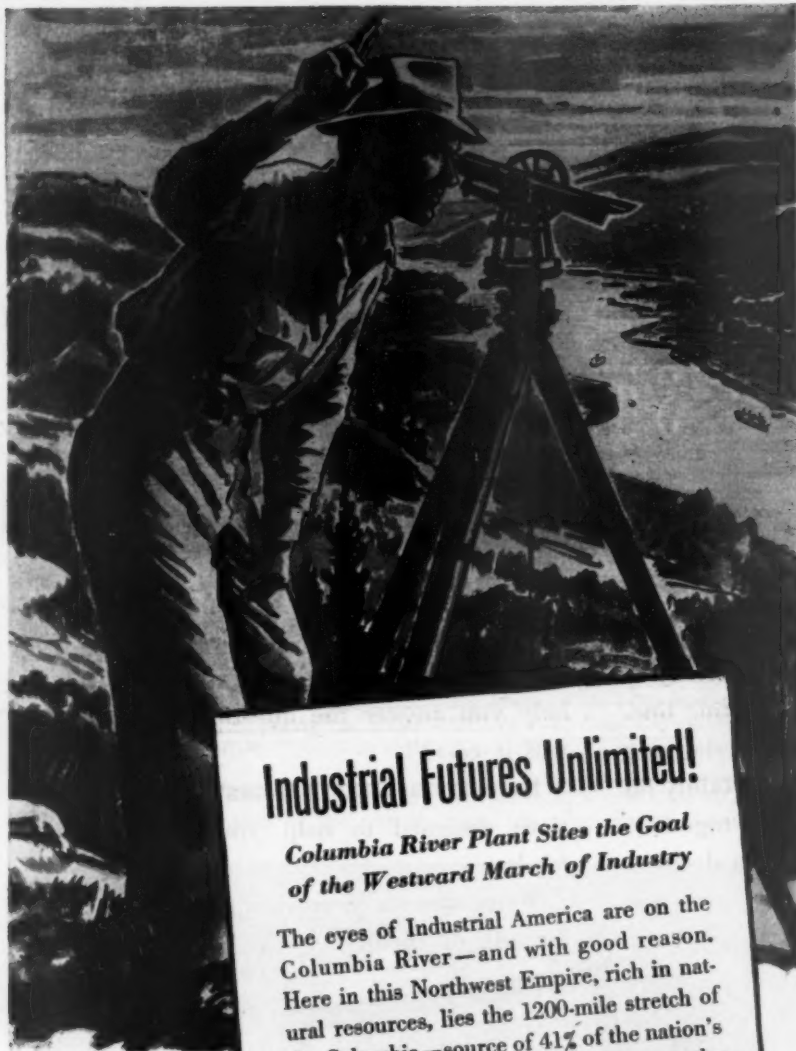
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## Industrial Futures Unlimited!

*Columbia River Plant Sites the Goal of the Westward March of Industry*

The eyes of Industrial America are on the Columbia River—and with good reason. Here in this Northwest Empire, rich in natural resources, lies the 1200-mile stretch of the Columbia—source of 41% of the nation's hydro-electric power; the only point on the West Coast where trade to the land-locked states of the interior is carried at a water-level route; the only port on the Pacific Coast where ocean-going vessels bring world commerce as far as 190 miles inland!

Think what this means when translated into terms of the future of your industry, unlimited power at your doorstep; cheap transportation for your goods by land, air and water, both to the interior and down the Columbia—to the world!



**ONE NEWSPAPER  
ALWAYS LEADS!  
IN OREGON, ITS  
THE OREGONIAN**

# The Oregonian

*The Great Newspaper of the West*  
PORTLAND, OREGON

REPRESENTED NATIONALLY BY PAUL BLOCK & ASSOCIATES

this oil traffic after the war in competition with the cheaper ocean tanker service, now constricted by the submarine menace.

● **In the Black**—War conditions were reflected in the 1943 report of the government-owned Federal Barge Lines, the largest of the many carriers operating on the rivers. The tonnage handled in the line's own equipment was 14.5% less than in 1942, but 433,384 tons towed for other carriers under reciprocal agreements brought the total tonnage last year to 2,366,046 against 2,318,654 in 1942. The company had a net income of \$178,012 in 1943 in contrast to an operating deficit of \$762,492 in 1942.

F.B.L.'s five divisions show the following tonnage for the past two years:

Division	1942	1943
Lower Mississippi...	1,454,832	1,423,992
Upper Mississippi...	724,060	541,085
Illinois River.....	599,157	487,705
Missouri River.....	72,903	35,261
Warrior River.....	220,293	186,661

\*Total ..... 2,260,697 1,932,662

\* Single count—after elimination of shipments exchanged between various districts.

● **Savings Cited**—F.B.L. claims that in 1943 shippers saved \$1,796,700 in the difference between rates paid on traffic routed via its barges and the charges that would have been made had the traffic moved all-rail. On this basis, F.B.L. calculated that it saved shippers a total of \$41,031,700 from its creation on June 1, 1924, to Dec. 31, 1943.

The river man's old bogey of imbalance of upstream to downstream traffic resulted in 70% of the line's tonnage in 1943 being upstream, necessitating the movement of much equipment downstream empty or partly loaded. Freight towed for others in 1943—almost entirely petroleum products—was 93% upstream. On the line's Mississippi system, merchandise freight slumped 22%. Boosted movement of petroleum products and grains failed to take up the slack due to decreased coal and sulphur tonnages, and total bulk freight was off 10%.

## STATE CONTROL BOOSTED

Proponents of state government participation in aviation development and control got a helpful boost last week from the Minnesota Supreme Court.

In upholding constitutionality of the Minneapolis-St. Paul Airports Commission—and its \$1,000,000 appropriation—the court unanimously spoke out in favor of centralized aviation control by states, citing the need for unified and integrated regulations to insure safety in the air. The court commented that establishment of adequate air terminals

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Drop that cyanide tablet, Mr. Office Manager, and remember the old legend: Once upon a time, a king challenged his wise men to write one sentence which would apply to all things, at all times. And the wise men came up with the line, "This, too, will pass away." So you can apply it to your present problems of wartime office confusion. And you'll see it pass more quickly if you send for—

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#### "MR. EXPEDITER, O. D."

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of their confusion. After the war, when needed equipment may once more be had, he'll do a marvelous job. But even today he'll be able to help you iron out office tangles.

And in the matter of postwar office planning, Art Metal's Mr. Expediter is a bit of a modern Merlin. Why not ask him in—no charge, of course!—and see what he can do to smooth out your present operations? Ask also to see his idea-ful book, "Manual of Desk Drawer Layout." Just call your local Art Metal branch or dealer, or write Art Metal Construction Co., Jamestown, New York.

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#### POSTINDEX VISIBLE FILES

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SYSTEMATIZED EQUIPMENT AND RECORDS FOR BUSINESS

and facilities for controlling aerial traffic is far beyond the capacity of private enterprise.

Taking note of the complications of aviation regulation, the court said that if the appropriation involved had been for control and policing of highway traffic, there would have been little difficulty of sustaining the expenditure. Opposition to the Twin Cities' aviation plan was instituted by taxpayers who claimed that the commission and its appropriation constituted special legislation and taxation for private purposes.



### PORTABLE STORM BOAT

Carried to a stream, the Army's 650-lb. plywood storm boat provides an assault crossing for infantry troops.



As the 50-hp. outboard engine roars, the eight men and two crew members crouch low to avoid enemy gunfire.



Whipping up 23 m.p.h. when loaded to capacity, and drawing only 16 in. of water, the 19-ft. "waterbug" goes well ashore for dry and easy embarkation.



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**CARDINEER**  
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Capacity, 2500 cards



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**CARDINEER**  
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Capacity up to 15000 cards



**CARDINEER**  
The Master Model, 72-59  
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Cardineer—now available in *four different models*. Keeping office records in wartime demands equipment best suited to the job. To save manpower—to speed work—to conserve space—to promote contentment among employees, use the Cardineer.

Compact, portable, and trim, Cardineer provides *now* a method of record keeping that saves time and money against

the day when economy of operation may be the difference between profit and loss. So, look ahead to postwar conditions. Get prepared *now*.

Cardineer holds up to 15000 cards for quick posting or instant reference. No eye-strain—greatest control—lowest cost. Choose the model best suited to your needs. Phone or write for literature. Ready for *immediate* delivery.

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## You helped build this bridge

500 feet of rope was all it required. Little enough by itself but rope has thousands of such jobs to take care of on the fighting front.

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## Poppies in Court

Federal judges ponder plea for injunction to halt U. S. interference with crop as seed spoils in California.

Win or lose in their fight to have the 1942 federal opium poppy control act declared unconstitutional, seven northern California farmers who staged a "poppy rebellion" recently (BW-June 10'44,p34) by defying orders of federal narcotics agents to destroy 575 acres of blue poppies, last week faced loss of their \$500,000 crops through the element of time.

• **Injunction Asked**—Indicted by a federal grand jury on charges of growing opium-containing poppies without a federal permit, the farmers attacked the validity of the opium poppy control act on the grounds that (1) it invaded state rights, and (2) that it provided for the destruction of private property without due legal procedure.

Test of the constitutionality of the control act was sought in an application for a permanent injunction to enjoin federal narcotics agents from interfering with the growing and harvesting of opium poppies for their seed. Counsel for the farmers pointed out that blue poppy seed is used for household condiments.

• **Storage Plan Blocked**—The insurgent farmers appeared before U. S. District Judge Martin I. Welch last week and he turned down their plea that they be allowed to harvest their poppy seed crop and put it in warehouses, at least until the case had been decided. The farmers' plea was that the seeds are mildewing in the pods, and that grass was growing up in the fields and going to seed, threatening to render the land useless for some time.

As the case now stands, the farmers are awaiting a decision from three federal judges who heard arguments last week in San Francisco on their application for the injunction.

• **State Law Cited**—Attorneys for the farmers pleaded for a quick decision in their favor, arguing that their clients were within their legal rights to grow poppies under a California state law. They contended that the perishable crops would soon rot in the fields unless the farmers were permitted to harvest them.

U. S. District Attorney Frank J. Hennessy, while admitting the seed perhaps would go to waste, resisted the plea by arguing that the poppy crops had been grown in violation of the poppy control act, and in the face of orders of

federal narcotics agents to plow under the plants.

• **Decision Deferred**—The court refused, however, to provide the farmers with immediate relief. Instead, it took the case under advisement and gave counsel for the farmers 15 days in which to file briefs. An additional ten days were allowed to the United States attorney in which to file his answering brief. The narcotics agents were of the opinion that by the end of the 25-day period there probably will be no poppy seed left to harvest.

The growers, on the other hand, are expected to seek a decisive ruling on the validity of the poppy control act. In the event of an adverse decision in the San Francisco U. S. Circuit Court, a review of the case probably will be sought in the U. S. Supreme Court for the guidance of West Coast farmers in future years.

## Repair Is Stressed

Tank program emphasizes rebuilding of old vehicles from the training grounds. Chrysler and G.M. cooperate on tank.

Renovation and rehabilitation bulk larger in the new tank program than appeared likely when the first details were made public (BW—Jul. 8'44, p. 22). Except for one new model about which the Army is keeping mum, this means that the aggregate of new tanks will be somewhat smaller than the original reports led observers to expect.

• **Hint of Emphasis**—Chrysler Corp. gave some hint of the emphasis which will be laid on the rehabilitation of existing tanks in an announcement last week that 2,000 M-3's and M-4's will be overhauled and modernized at its Evansville (Ind.) plant. American Car & Foundry Co. is expected to renovate another 1,200 tanks—M-5's and possibly M-3's.

Chrysler in Detroit and Fisher Body in Flint will share substantially in the new construction program, although not to the point of pushing their assembly facilities to capacity as originally expected. Both are producing M-4 Sherman mediums, but at a modified pace (BW—May 27'44, p. 18).

• **Diesel Tank**—Known details of the program take no account of the new medium tank now in production under the combined efforts of Chrysler, General Motors, and General Motors Diesel. This tank is said to possess great fire power and to be mounted on a wide, low chassis. A safety factor is that it is powered by a supercharged diesel

# FACT OR FICTION?

A 47 SECOND TEST ON  
**ICE**  
USED ON THE "MAIN  
STREET OF THE NORTHWEST"



**Q.** Trained beaver build dams in mountain streams to provide ice used in Northern Pacific refrigerator cars. Fact or fiction?

**A.** Fiction . . . but N. P. crews do exactly that, to help supply 180,000 tons of ice used yearly on the system.



**Q.** Ice used in N. P. passenger cars alone could supply 25 lbs. daily for more than 4,000 home refrigerators. Fact or fiction?

**A.** Fact. N. P. has 25 huge ice houses which supply artificial ice for diners, natural ice for refrigeration.



**Q.** Ice bunkers are novel hazards on Rocky Mountain golf courses. Fact or fiction?

**A.** Fiction. They're ice chests built into refrigerator cars. Last year Northern Pacific moved 575,000 tons of perishables under refrigeration.



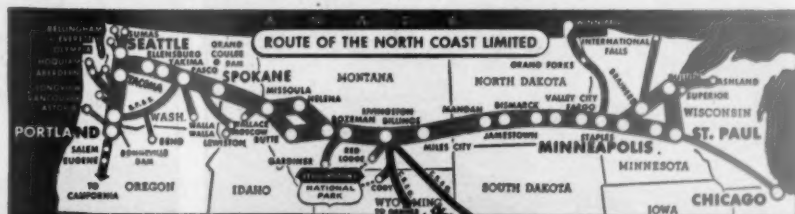
**Q.** Pink waybill controlling a car means "KEEP CONTENTS IN PINK OF CONDITION." Fact or fiction?

**A.** Fact. It's a signal to every railroader, demanding top speed, frequent servicing, for iced foods in transit.



**Q.** Hundreds of expert icemen work on one U. S. Main Street. Fact or fiction?

**A.** Fact. They are N. P. ice specialists, serving major shippers of fruits, vegetables, meat, butter, other perishables on the Main Street of The Northwest.



**NORTHERN PACIFIC**  
*Main Street of the Northwest*



engine which minimizes the hazard of fire.

• **Converting from Cartridges**—For the rehabilitation work, Chrysler is converting the Evansville plant, which has been used for the manufacture of cartridges. Some 2,500 persons will be retained on the Evansville payroll, a little more than half the number employed there to make ammunition. Many employees already are being trained for the work.

For the present at least, only tanks from the training grounds of the armored forces will be handled at Evansville. Rebuilding of battle-damaged equipment there is not contemplated in present plans.

• **Heavier Armor?**—The Army has not specified the extent to which the tanks will be rebuilt, but it is assumed that the project will include heavier armoring and greater fire power. Notably greater speed seems out of the question, because power plants to be installed in the tanks necessarily will duplicate the original equipment.

Chrysler expects to take ten months on the 2,000 units, delivering half of them by the end of this year, the other half before next summer.

## Wired for Heat

Electrical home heaters are rare now, but a bright future for them is seen in areas of cheap and plentiful power.

Electric heating for new homes is a possibility that intrigues the imagination of architects and builders who operate in areas where electric power is both cheap and plentiful.

Enthusiasm for electric home heating, to date, has been limited geographically to the service districts of the Tennessee Valley Authority and the Bonneville Power Administration.

• **Development Due**—Neither General Electric nor Westinghouse has generated any visible faith in electric heating for the average home. These manufacturers, however, indicate that they believe that the science of home heating is due for intensive and interesting developments, and electricity may comprise one chapter.

In Vancouver, Wash., Bonneville

power from the Columbia River has been used, experimentally, to heat rocks in metal containers. Heat is radiated more slowly than it is generated in this modern version of ancient hot rock technique (BW—Jul. 1 '44, p48).

• **Economy Possible**—By using cheap power in off-peak hours, some Bonneville engineers say, the cost of heating a small, two-bedroom home—if it is built and insulated for electric heating—can be as low as \$35 a year, compared with the coal heating cost of about \$75.

Harold W. Partlow, chief of Bonneville Power Administration's utilization unit, points out that electric house heating in the Northwest is 30 years old, beginning with Tacoma's  $\frac{1}{4}$ ¢ per kilowatt-hour heating rate established in 1914.

There were 925 houses using electric heat in 1920. But a combination of design and construction faults in housing and heaters, and elimination of the  $\frac{1}{4}$ ¢ rate, reduced this number to 250 in 1940. The score now, in the Northwest, is about 1,000 electrically heated homes.

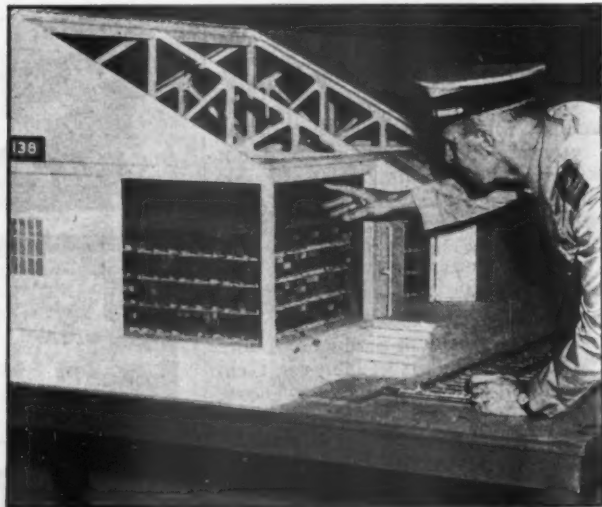
• **Bright Future Seen**—Partlow thinks that the future of electric house heating



## MODEL SHIPPING

To speed shipments and reduce handling costs, the Bureau of Naval Ordnance first works out its freight and space problems with table-top models in a novel laboratory at Hingham, Mass. There miniature cargo units are maneuvered around tiny warehouses (below right), railroad cars (below left), docks, barges, and ship cargo holds (left) to determine the easiest methods of moving the Navy's mass

of equipment. Specialty of the laboratory, however, is working out to the last detail the handling of stores with conventional industrial fork trucks and pallets. Properly strapped on pallets, most materials can be moved swiftly from depots to shipside. In holds, fork trucks stow the compact units, move them to within reach of boom hooks when ships dock, while others carry the units to shore warehouses where they receive their first manual handling since leaving factory.



HIGHWAY TRANSPORT . . . VITAL TO VICTORY AND THE AMERICAN WAY OF LIFE



## A Busman's Holiday

The Busman, so the story goes, is the fellow who usually goes for a bus ride on his day off. Fortunately for America's hard-working war plants, shipyards and military bases, this story today holds more truth than fiction.

In 1940, before the war, coach lines carried around four billion passengers. War workers and military travelers swelled this figure to the staggering total of nine billion in 1943. This means that, on the average, each of America's 73,310 coaches is carrying more than 122,000 passengers per year . . . more than 330 per day. This remarkable record was accomplished with the addition of very little new equipment.

As these almost incredible figures show, no other group is working harder and longer to help win the war than the employees of America's Coach Lines.

A recent statement from the Office of Defense Transportation emphasized that: "Automotive Transportation is absolutely essential to the winning of the War. Goods must reach their destinations and workers must get to their jobs . . . on time." Join the U. S. Truck Conservation Corps and keep your trucks in best possible condition. Your GMC truck dealer is pledged to help you.



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YOUR PRINTER

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has a sound foundation in the study of past failures and present experiments. In low-rate areas, averaging  $\frac{1}{2}$ ¢ per kwh., Partlow predicts that electric heating installations after the war will increase at an accelerating rate, becoming almost as common as electric ranges and refrigerators.

About 95% of electric home heating installations have been unit type room heaters. Unit heaters have two main selling arguments: (1) low cost, only about \$300 installed complete with necessary interior power circuits in a five- or six-room house of the \$4,000-to-\$7,000 class, and (2) elimination of heat losses in air ducts or pipes, which often are associated with central heating systems.

Another advantage is that each room may be kept at its own comfortable or economical temperature, as desired, because each unit has its own thermostatic control.

• **Insulation Is Factor**—Electric heating has been least satisfactory in older houses that were not properly insulated, weatherstripped, or equipped with double-glaze windows.

Studies by the TVA division of electric development tend to confirm the electric heating cost figures of Bonneville engineers; that is, heating a small, well-insulated home by electricity costs only \$35 to \$40 a year, providing you have a  $\frac{1}{2}$ ¢ per-kwh. power rate.

There are some 1,000 electrically heated homes in the TVA area, including those in Knoxville, Norris, and Chattanooga, Tenn., Tupelo, Miss., Florence, Decatur, and Guntersville, Ala.

• **Skeptical View**—Bonneville and TVA both operate in regions where the winter climate is less severe than in many other parts of the United States, skeptics are quick to point out, and in both

these areas, the importance of insulation and weather-tight construction are emphasized in all discussions of electric heating.

Typical of variations in conventional heating plans are schemes to heat by hot water pipes in the floor, ceiling, or walls. It is pointed out that electricity could be used to heat the water.

## Safflowers Bloom

**Hardy plant, adaptable  
to rough highland cultivation,  
yields needed oils and interests  
Western farm groups**

Some 250 acres in western Nebraska's rough uplands are planted this summer in spiny, unfamiliar-looking plant, the East Indian safflower.

Its seeds are almost one-third oil—averaging 29.8%—and according to experiments carried on for two years in the chemurgic division of the University of Nebraska, the oil is a suitable substitute for linseed oil in many uses, is a good base for synthetic resins, and may be used in human or stock food.

• **Upland Crop**—The particular interest of the West, however, is that the annual safflower does not grow well at less than a 3,000-ft. altitude, and flourishes at altitudes much above that. And, while it does better with irrigation—yielding from 1 to 1½ tons of seed an acre—it will yield from 200 to 1,000 lb. an acre on dry land, making it a possible highland crop where irrigation isn't feasible.

Alliance (Neb.) Safflower Co., a co-operative venture of farmers and businessmen, is promising farmers \$3.50 per cwt. of seed for this year's crop. The primary purpose of the 1944 planting is to

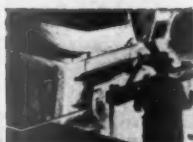


Fields of safflower in Nebraska provide material for chemurgic research that may develop a new oil and feed crop for the high and dry lands of the West.





LUMBER INDUSTRY



METAL MANUFACTURE



PETROLEUM INDUSTRY



SCIENCE



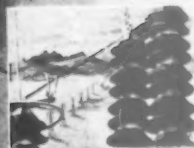
MEDICAL THERAPY



POLICE COMMUNICATIONS



TELEVISION



ELECTRICAL INDUSTRY



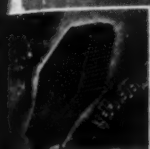
AGRICULTURE



COMMERCIAL AVIATION



PLASTICS



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*no matter how you use it ...*  
**electronic equipment is no better than the tubes it employs**



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 Sixty-four pages, fully illustrated and written in language the layman can understand. This booklet is available to you without cost or obligation.

Whether it is electronic heating, radio broadcasting, television or aircraft instrument landing equipment, the electron vacuum tube is the thing that makes it "tick." The electron tube is to electronics what the engine is to your automobile. Therefore, be you chemist, lumberman, manufacturer or physician...if you employ electronics today or are planning to do so "tomorrow"...you should look first to the electron vacuum tube before you adopt any equipment.

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one of YOUR  
employees?*



This man is one of the more than 100,000 factory workers injured annually by material handling accidents, which take a yearly toll of 5 million lost working days. The cost of compensation alone for these injuries amounts to \$15,900,000—and the cost in lost production is many times this figure . . . Handling heavy objects, overloading hand trucks, improper stacking, etc., accounts for 25% of all industrial plant casualties—many of them serious. The most tragic part of the story is that all these accidents are unnecessary—and most could be avoided by the use of power industrial trucks.

A check of your material handling operations may reveal hazards in your plant that could easily be removed. The Baker Material Handling Engineer is the logical man to help you find them.

## BAKER INDUSTRIAL TRUCK DIVISION

*of the Baker Raulang Company*

2164 WEST 25th STREET • • • CLEVELAND, OHIO  
In Canada—Railway and Power Engineering Corporation, Ltd.

**Baker INDUSTRIAL TRUCKS**

obtain sufficient seed for a much larger acreage in 1945.

The plant stands from 15 in. to 30 in. in height when ripe and the branches carry spines like a thistle.

• **Combines Needed**—As a row crop cultivation has to be completed about June 20. After that the spines of the plant make it extremely uncomfortable for a man, even riding a cultivator. The only practical method of harvesting is by combine.

The seed has been tested—in oil cake form—as feed for lambs and steers, both in Montana and in North Dakota. Whole seed is reported to average about 16.3% crude protein.

• **Five Kinds**—There are five varieties planted near Alliance—from about 8,000 lb. of seed—and their relative oil content as determined in chemurgic experiments runs from 28% to 32%.



## BUSY LINE

"Multiple-channel broadcasting" over a single conventional telephone circuit will permit convalescents their choice of programs at the Army's Gardiner General Hospital in Chicago. Now being installed by Chicago's Electronic Sound Engineering Co., the system has bedside selectors to tune in any of five preselected radio programs, and a main control unit from which emergency messages can be put on all channels. The company asserts its system is cheaper to install than ordinary "piped" installations, and can carry up to ten programs—including FM—over a single circuit, but is keeping mum on how it operates. Obvious guess is the employment of high frequencies, and a tuner and rectifier in the bedside selector unit.

## Melons Are Lush

And so are the prices, for cantaloupe and watermelon have moved into luxury class. Big harvests seen for both.

Watermelons and cantaloupes moved into the luxury class this summer partly because OPA was late in applying ceilings, partly because production costs are up, partly because the seasonal break in prices came some ten days later than July 4, the usual date.

• **Estimates Are Higher**—Crop reports for cantaloupes estimate that 5,891,000 crates will be harvested before Sept. 1, compared with 4,202,000 last year. There are about 35 to 45 melons to a 60-lb. crate. California will ship 3,000,000 of these crates, Maryland about 800,000, and the rest will come from other areas. The early crop from California's Imperial Valley has been sold and eaten already.

Honeydews, exclusive of earlier ones from the Imperial Valley, will total 2,730,000 crates (about eight melons to a 40-lb. crate) this year, compared with 2,000,000 crates last year. California accounts for two-thirds of these, Arizona almost one-third.

Honeyball shipments up to July 8 amounted to 75,000 crates, almost the same as last year.

• **More and Better**—Watermelons, too, will be a bigger harvest than a year ago with 51,000,000 melons expected, compared with 41,000,000 last year. The quality of the long green Tom Watsons, the round striped Cuban Queens, and the dark round Cannonballs was better than usual. Florida's early harvest had reaped the high prices, as much as \$2.50 a melon, but as the Georgia and Texas crops moved to markets in boxcars, consumers could buy them for at least \$1 less.

It takes four acres to grow a carload of watermelons, and farmers who are getting about 1¢ a lb. for a 25-lb. melon caused the Dept. of Agriculture to argue against wholesalers being permitted to claim equal profits. A compromise, ordered by the Office of Economic Stabilization, however, couldn't cut transportation charges, shrinkage, and bigger labor costs.

• **Difficult to Weigh**—This week OPA was conferring with the War Food Administration on a better way of merchandising watermelons. Grocers complain that they have no scales big enough to weigh the fruit. Some meet the issue by cutting melons in half. Difference in size, of course, makes sales by the melon difficult to regulate.

# OK'd

BY CITY OFFICIALS  
AND MERCHANTS  
EVERYWHERE



Wherever installed, MI-CO Parking Meters have won the unqualified endorsement of city officials and merchants. City treasuries have been

enriched; merchants say business has grown; and motorists like them because they assure parking space. Entire communities have benefitted. MI-CO Meters offer you many advantages. Perhaps the most outstanding is low cost maintenance, and this feature alone

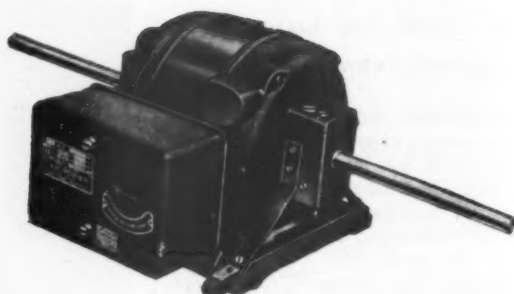
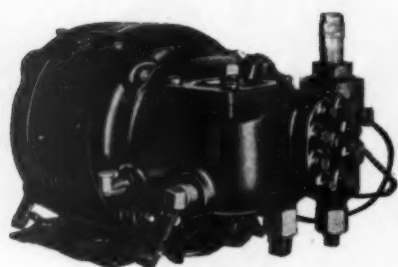
is responsible for a number of installations. Low cost upkeep is the result of correct engineering, sturdy construction, and fewer moving

parts. Get all the facts. Write for folder which gives complete information. Of course these meters will not be available until material restrictions are lifted, but the time to plan is now, and it will be to your advantage to consider MI-CO Parking Meters for your community.

**MI-CO METER CORPORATION, 231 Court St., COVINGTON, KY.**

Manufactured under the patents of F. L. Michaels  
by The Michaels Art Bronze Co., Inc.





## HOLTZER-CABOT

### SPECIAL FRACTIONAL HP MOTORS DESIGNED TO FIT THE APPLICATION

Operating conditions do vary in motor applications — and the only way to meet performance requirements is to use special motors specifically designed to meet conditions such as load cycle, speed stability, speed control, reversal of rotation, atmospheric conditions and quietness.

For over 50 years Holtzer-Cabot has concentrated its facilities in the design and application of special fractional HP motors to meet the performance requirements of such products as instruments, aircraft, machine tools, business machines. Although today all of our energies are being utilized in building motors for military products, our motor development engineers will discuss your peace-product motor problems with you.



## THE HOLTZER-CABOT ELECTRIC COMPANY

*Designers and Builders of Special Fractional HP Motors and Electrical Apparatus*

125 AMORY STREET, BOSTON 19, MASS.

New York, N. Y. • Chicago, Ill. • Philadelphia, Pa.

## G.I. Education

Technical schools want large share of veterans with government-paid tuition. Trade group would raise standards.

The billion-dollar bonanza in the G.I. Bill of Rights (BW—Mar. 25 '44, p. 21) will make education an even bigger business after the war. Every eligible veteran will have about \$1,000 exclusive of his bonus to spend studying for a better peacetime job. Some 23 associations representing the old-line colleges and universities have seen to it that they will get their share.

• **Sales Argument**—Now the technical schools are preparing for their cut. In normal times (1939) there were 125 students, mostly male, in technical, commercial, and home study courses of privately operated schools for every 100 in regular colleges giving general instruction. These 1,600,000 vocational students paid their own tuition, thus indicating that they bought what they wanted.

Technical schools therefore argue that many of the veterans are going to want trade school preparation for jobs rather than courses in history, literature, or foreign languages.

• **To Raise the Standards**—Technical schools never have been highly organized, and the good ones have been hurt by fly-by-nights. Now a group of the better technical schools have hired Dr. J. S. Noffsinger to create a trade association, raise standards of ethics, improve courses, and bring technical schools into closer touch with industry.

Dr. Noffsinger is the man who has kept down to 42 the 300 correspondence schools that have tried during the past 19 years to join the trade association he organized in their group. By autumn, he hopes to have the best technical schools inspected, revised, and ready for an approved list that will give their graduates the confidence of employers.

• **Memberships Vary**—Fourteen technical schools (of about 80 in the U. S.) are contributing funds for the work of classification. They are:

Aero Industries Technical Institute, Los Angeles; Aeronautical University, Chicago; American School of Aircraft Instruments, Glendale, Calif.; Bliss Electrical School, Washington, D. C.; Bowman Technical School, Lancaster, Pa.; Capitol Radio Engineering Institute, Washington; Chicago Technical College; Curtiss-Wright Technical Institute, Glendale, Calif.; Heald Engineering College, San Francisco; Lincoln Aeronautical Institute, Lincoln, Neb.; Midland Radio and Television Schools, Kansas City; Milwaukee School of Engineering;



### Tough Problem + Stainless Steel = Product Improvement

In processing nylon parachute cloth, tenter clips, equipped with special *Stainless* jaws, are used to grip and stretch the fabric as it rolls through the final stages of finishing. These jaws must be spotless and non-corrosive, for a slight surface defect might break a delicate thread and cause failure of the 'chute in action.

Carpenter *Stainless* #3, used in these tenter clip plates and blades, not only provides protection from the corrosive action of dyes, but also gives these jaws the necessary wear-resistant properties for long service on the job. This includes resistance to abrasion from talc and china clay used in other textiles processed in this type of equipment. And, of course, *Stainless* is easy to clean and to keep clean, thus

eliminating the danger of color transfer from one process to another.

That Carpenter *Stainless* #3 has done its job well is shown in the fact that it has been used exclusively by a manufacturer of tenter clips for 18 years.

No matter what your new or redesigned products may be, Carpenter *Stainless* will simplify your production headaches, provide longer, trouble-free service and add gleaming sales appeal! And, you'll be most likely to get the best results by working with an organization that pioneered *Stainless* Steels. Your nearby Carpenter representative is ready to talk special physicals, corrosion resistance, bright surface finishes. Call him in NOW!

THE CARPENTER STEEL COMPANY, Reading, Pa.

*Carpenter*  
**STAINLESS STEELS**



BRANCHES AT

Chicago, Cleveland, Detroit, Hartford,  
St. Louis, Indianapolis, New York, Philadelphia

...for

Strength  
Rigidity  
Heat Resistance  
Corrosion Resistance  
Longer Product Life  
Sales Appeal

Valparaiso Technical Institute, Valparaiso, Ind.; and Western Pennsylvania Horological Institute, Pittsburgh.

There are three classes of members. Fees range from \$100 to \$1,000, depending on income. Active member schools must have been in operation five years, offer at least 1,200 hours of instruction a year (35% theory, 40% laboratory), have approved teachers, adequate housing, ask reasonable fees, use a uniform grading system, and advertise truthfully. They will also have to get permission of the state educational boards to be eligible for veterans' tuition.

Associate member schools must be at least two years old. Affiliates may be privately endowed institutions.

• **Two Big Groups**—Technical schools think their biggest enrollment will come from two groups of veterans: men about 25, married and with one child, who have been out of school about ten years and now have to learn more to earn more, and boys who have never held jobs before and could only get dead-end placements with little future.

Dr. Noffsinger states that for every college-trained engineer, five workers of supervisory grade are needed. Educators hope that vocational training will prevent many students from wasting four years in liberal arts colleges if they are better fitted for factory jobs.

## Going, Going—

**New Orleans auctioneer of commercial properties is getting ready for a postwar boom in white elephants.**

Virtual abandonment of a large number of army camps because of excess camp capacity (BW—Jan.29'44,p8), coupled with planning work on the disposition of all surplus properties, has brought sharply into focus a problem which will be a big headache to Washington come the end of the war—the problem of dismantling and disposing of that portion of the war machine which can't be converted readily to peacetime production.

It takes only a glance back to the dismantling operations which followed the last war to perceive the dimensions of the job which will confront this generation of industry when the current struggle is ended.

The magnitude of the task has not escaped Gerth's Realty Experts of New Orleans, which assisted in marketing many of the government's white elephants after the World War and even now is hard at work polishing its auc-

tion block for the pale pachyderms of this one.

• **Multilingual Auctioneer**—Charles S. Gerth can sing the chant of the auctioneer in six languages. His multilingual tongue has made it possible for him to conduct sales in Germany, China, Japan, Russia, Denmark, Poland, Mexico, and Guatemala, and he has had clients in England, Canada, Ireland, the Philippines, and British Honduras, too. In the 35 years he has been pursuing his specialty, he has conducted 1,526 auctions of real estate at prices that range up to five and a half million dollars.

Sale of the Willys Corp. plant at Elizabeth, N. J., in 1927 always will be Gerth's cherished memory. For seven months, leading brokers searched for a buyer. The best price they could get was \$3,200,000; the receivers were insisting on \$4,000,000. The receivers consulted Gerth, and he put his staff of title lawyers, appraisers, financial, engineering, advertising, and sales experts to work on an auction.

• **Sold, American!**—Bidders came from Germany, Sweden, Japan, China, England, France, and Norway. But an American bidder, W. C. Durant, bought the plant. In two hours and 51 minutes, he pushed the price up to \$5,525,000 and walked out with the deed to the factory in which he later made his Star automobile.

Gerth is the owner and mainspring of the organization, which maintains branch offices in Chicago, Detroit, Los Angeles, Denver, El Paso, and Hartford. He supervises all the auctions and conducts all those within his lingual range. • **Allows 21 Days**—A graduate of Yale University and Yale Law School, Gerth dabbled in law, journalism, and the politics of his native Connecticut until the real estate bug bit him in 1908. He held his first auction—some houses and lots in Atlantic City—that year, liked it, and stuck to it. His associate in the Atlantic City deal—Henry J. Prince—is still his first lieutenant.

Gerth allows an average of 21 days for each transaction. He turns loose his whole staff of specialists on a job. Their advertising buildups have attracted as many as 12,000 persons to a single sale. Last May 24, the Gerth staff crowded 4,000 bidders into the ballroom of the Hotel Sherman for the sale of 26 apartment and business buildings in Chicago. The properties brought \$1,747,900 in less than five hours.

• **Housing Project Sold**—Relics of the World War which passed under Gerth's hammer included Camp Funston at Junction City, Kan., Camp Gordon near Atlanta, and Camp Grant near Rockford, Ill.; a shipyard at Alameda, Calif., Raritan Arsenal, Perth Amboy, N. J.; an uncompleted shell plant on Neville

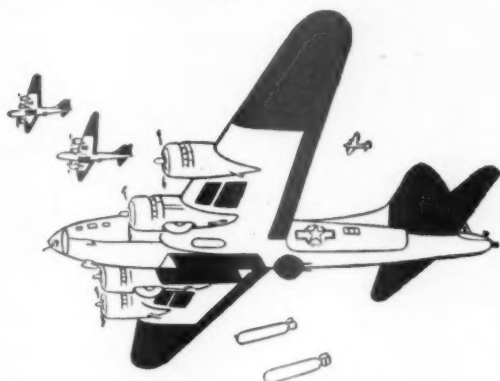


## TOOLS REROUTED

For the Army Air Forces, finding homes for leftover cutting tools has been simplified by establishment of a warehouse in Chicago (BW—Feb. 5'44,p32). AAF sells no tools; it serves as warehouseman for the Reconstruction Finance Corp. and the Treasury Dept., which make the sales. When a

manufacturer's contract is terminated, tools in his bins are frozen for a period of 20 days while AAF determines whether they are needed by its other contractors. If not, the surplus tools are shipped to Chicago and inventoried for prospective purchasers among war contractors, who may examine them at the warehouse. Special care is exercised to thwart speculators.





# BRIGGS REPORTS

## on One Billion Dollars in War Orders

### —and how the money is being spent

During peacetime, Briggs Manufacturing Company is the Nation's largest independent automobile body manufacturer. In the war Briggs is devoting its peacetime skill to making bodies and parts for medium tanks and aircraft; also, bomber turrets, droppable gas tanks and non-ferrous castings.

Briggs war orders total approximately \$1,000,000,000. This money has been spent or is being spent as indicated in the box shown herewith. Percentages are based on distribution of Briggs 1943 sales dollar.

In 1943 Briggs did twice as large a dollar volume of business as it did in an average peacetime year. In 1943 Briggs delivered double the number of tank hulls delivered in 1942. In the same year Briggs delivered to the U. S. Army and Navy more than 22,500,000 pounds of airplane sections, as compared with 7,000,000 the year before. This included almost twice as many bomber fire-power turrets as in the previous year. Total shipments to date of airplane sections by Briggs exceed 45,000,000 pounds.

Earnings by Briggs hourly paid employees in 1943 averaged \$3,159.00. On December 31, 1943 there were 39,312 people on the Briggs payroll, of which 21,737 were men and 17,575 women. This is 48% greater than on December 31, 1942 when Briggs payroll was 26,401 people.

In the first five months of 1944, shipments of airframe

<b>53.6%</b>	to about 40,000 employees for wages and salaries.
<b>0.2%</b>	for executive salaries.
<b>32.1%</b>	to some 2,000 sub-contractors for materials, supplies and assemblies.
<b>1.9%</b>	to stockholders for dividends.
<b>9.2%</b>	for taxes.
<b>1.2%</b>	for depreciation.
<b>1.2%</b>	for reconversion expenses and other costs arising from the war.
<b>0.6%</b>	left in the business.

sections, by Briggs, were at considerably greater monthly rates than during any other months since the war began. Production of tank hulls was almost equal to the 1943 rate. Deliveries of auxiliary gas tanks, for the first five months of this year, were 7 times the total for 1943, and shipments of aircraft fire-power turrets were at a rate almost twice that of last year.

Unless very extraordinary developments take place, Briggs 1944 war business should be equal to, or exceed, its record 1943 year.

During the war, Briggs has shown that experience in manufacturing good automobile bodies, plumbing ware and non-ferrous castings has enabled it to turn out good "bodies for bombers, fighters, tanks" and other war requirements. Briggs is

glad that it has been able to play an important part in the Nation's war effort. All of its facilities and energies will continue to be available to the Armed Forces until Victory has been won.

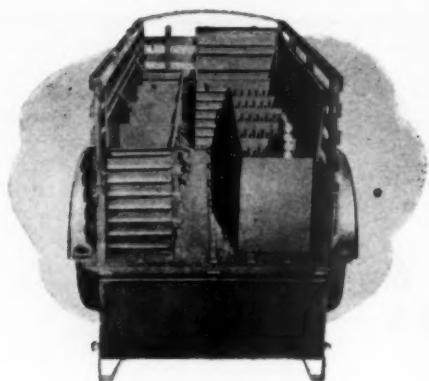
However, when Victory does come, Briggs is prepared to go about the job of reconversion with the same dispatch and intensity that it applied to the preparation for war, and, if it is allowed to do so, can go back into at least some peacetime production quickly.

W. O. BRIGGS  
Chairman of the Board

W. P. BROWN  
President

**BRIGGS  
MANUFACTURING  
COMPANY**  
DETROIT





## How we designed a "fitted case" for fast traveling Army men

**E**VER wonder how ammunition is passed to our fast-moving army when it's fighting far from home base?

Well, take a look at that innocent looking trailer. It's a regular arsenal on wheels. On the right are removable chests into which clips of 37 mm. machine gun shells are neatly and securely fitted. On the left is a case with fitted compartments for caliber 50, expendable ammunition boxes; also, quick acting clamps for carrying extra gun barrels. Provided too, are compartments for rainproof storage and the winterized equipment which front line batteries need. Not an inch of space has been wasted, not an ounce of excess weight can be found.

The conversion of this standard

one-ton, two-wheeled trailer into an efficient ammunition carrier is another example of Union Metal's craftsmanship in steel fabrication. It incorporates many of the "strength with lightness" ideas Union Metal engineers used in the past to produce better street lighting standards, better steel piles and better materials handling equipment—the corrugation of light gauge steel, for example, to give strength while reducing weight and bulk; the streamlining of all parts to increase capacity.

Right now all of our efforts are devoted to Uncle Sam, but when peace comes our manufacturing facilities and the proven skills of our craftsmen will be available to you. The Union Metal Manufacturing Co., Canton 5, Ohio.



**UNION METAL**  
*Craftsmen in Steel Fabrication*

Island in the Ohio River near Pittsburgh; and a community of 503 homes near Wilmington, Del., built to house shipyard workers. The prices ranged from \$268,000 (Camp Grant) to \$1,573,000 (the housing project). His sales in foreign lands have included parcels of lots in China, Germany, and Honolulu.

The auctions usually go through without a hitch, but Gerth remembers one big one that got away. He was commissioned by the government in 1927 to auction the port terminal near Newark, N. J. Gerth got a bid of \$3,000,000, but the government was unable to deliver satisfactory title and the deal caved in.

### SUGAR BEET CROP OFF

The United States apparently will have little more beet sugar this winter than last despite all efforts of the War Food Administration to increase 1944 planting to 900,000 acres, about 50% above 1943.

The Dept. of Agriculture's July estimate is that 597,000 acres of beets will be harvested this fall, against 548,000 last year, with an indicated 1944 yield of 12.1 tons an acre against 11.9 tons in 1943.

It is too early to guess at sugar content, but the normal sugar yield would mean about 1,100,000 short tons of beet sugar for 1944, compared with the 933,000 short tons refined in 1943.

WFA raised the price of sugar beets to \$12.50 a ton for 1944 (\$11 in 1943), but spring storms in the high plains and Rocky Mountain states either rotted early seed in the ground or delayed planting until farmers turned to other crops.

### BARBER LAW DEFIED

The arrest of a Portland (Ore.) barber-shop owner is expected to lead to a further test of an Oregon law controlling minimum barber service charges.

The barber, who previously was unsuccessful in an attempt to have the law declared unconstitutional on the ground that it was contrary to public policy, is accused of operating his shop after his license had been suspended because he had failed to maintain minimum prices.

The act, adopted in 1943, provides that the state board of barber examiners may set as minimums the prices for services approved by at least a 70% affirmative vote of barbers in any county. Following such approval the board in September, 1943, established minimums of 65¢ for haircuts and 35¢ for shaves in 24 counties. Portland prices were not altered because the going rates were 75¢ for haircuts, and 50¢ for shaves.

## Goal Left Behind

War loan quota strongly oversubscribed, but individuals fail to do their share. Brunt is borne by corporations.

Corporations and institutional buyers were the stellar performers of the Fifth War Loan Drive, which—when all reports are in—is expected to be the largest financing operation in history, with total subscriptions nearing \$20,000,000,000.

• **Final Figures Awaited**—Complete details on the latest government financing operation—even though it ended officially at midnight on July 8—are not available yet, for the Treasury will include in the campaign's grand total all sales of savings bonds processed in July. Also being tabulated are mail subscriptions (if postmarked before the deadline) for marketable securities offered in the drive.

With the \$16,000,000,000 quota already far behind, the grand total stood just short of \$19,000,000,000 early this week and was climbing toward the 20-billion mark. This compares with \$18,944,000,000, the previous peak established in last fall's third war loan campaign.

• **The Big Buyers**—Final figures may reveal that over two-thirds of the fifth drive was subscribed by corporate and institutional buyers. Life insurance companies, permitted at a late date to anticipate future investment income and to delay payments until Sept. 30, purchased over \$2,100,000,000 of war loan securities. This was 23% more than their purchases in the fourth drive, when no extra privileges were granted, and brought gross purchases of this group this year to around \$4,550,000,000.

The fifth drive quota to cover purchases by individuals was \$6,000,000,000, or 37% of the over-all goal, compared with the \$5,500,000,000, or 39%, target of the fourth loan which was missed by \$190,000,000.

• **Citizens' Share**—At last report subscriptions by individuals hadn't even reached \$5,000,000,000. The Treasury thinks the quota will be reached before the drive closes, but there is doubt in other quarters.

Authorities don't think that the drive's results represent a true expression of the actual bond-buying power

of the nation's private citizens. Aside from the large part of hoarded currency that individuals probably now hold, even the lowest estimates of the division of ownership of new demand deposits in the banks indicate that over a third belongs to individuals.

The Treasury had hoped that the invasion news would make individuals shell out more easily.

• **Need for "New" Money**—Not to be overlooked is the fact that while corporations have done their part in rolling up the large oversubscription expected, actually much of this buying has not provided the Treasury with the "new money" it has been seeking, in the true sense of the word. For many corporations merely sold other federal issues in order to obtain funds with which to participate in the drive.

To the extent that such sales were absorbed by the commercial banks, the Treasury's objective of excluding banks from participating in the campaign was definitely defeated.

During the drive commercial banks could invest 20%, or \$400,000, which

ever was less, of their time and savings deposits of individuals in certain issues, and such subscriptions (not counted as part of the drive total) are said to have slightly exceeded \$700,000,000.

• **Bank Participation**—It is interesting to note that Federal Reserve reports disclosed that member banks purchased some \$4,000,000,000 of government obligations from June 7 through July 8.

Loans against governments rose \$1,758,000,000, and bank credit, as a whole, played a much greater part in financing fifth loan purchases than in the earlier 1944 drive, since such loans and member bank purchases of federal obligations in this period together equaled about 35% of the current goal. Only about 22% of the fourth loan quota was financed in that way.

• **More Free Riding**—One reason for the current rise in the use of bank credit is the revived activity of the "free rider" (BW—Mar. 11 '44, p80).

There are two classes of free riders: (1) The buyer who put up only a deposit for bonds and then sold them, before full payment was necessary, to a big purchaser willing to pay a premium. (2) The buyer who borrowed from a bank to cover government bond purchases and whose sole aim is to net the difference between the low bank inter-

## The Nation's Banking Leaders

The nation's 20 largest banks on June 30, 1944, disclosed total resources just short of \$39,400,000,000 and deposits of around \$36,650,000,000, or 9% above the 1943 year-end level, according to statistics recently compiled by the American Banker.

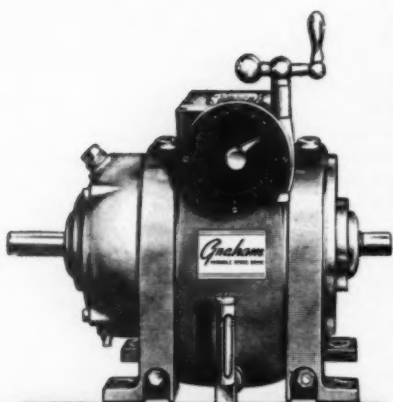
At the end of June, New York's Chase National Bank reported deposits of \$4,678,000,000 and its total resources all but reached the \$5,000,-

000,000 level. These are new high records, not only for Chase National but also for any commercial bank.

Few changes in individual ranking in the group are noticeable. San Francisco's Bank of America N.T. & S.A. continues to hold the position as the country's third largest bank which it finally wrested away from the Guaranty Trust Co. of New York just a year ago.

Position June 30 '44		Deposits		Position Dec. 31 '43
		June 30 '44	Dec. 31 '43	
1	Chase National (N.Y.)	\$4,677,873,000	\$4,375,582,000	1
2	National City (N.Y.)	4,157,821,000	3,733,649,000	2
3	Bank of America (San Francisco)	3,767,443,000	3,498,153,000	3
4	Guaranty Trust (N.Y.)	3,190,800,000	2,903,794,000	4
5	Continental Illinois (Chicago)	2,320,155,000	2,173,956,000	5
6	First National (Chicago)	1,974,014,000	1,803,686,000	6
7	Bankers Trust (N.Y.)	1,731,284,000	1,594,694,000	7
8	Manufacturers Trust (N.Y.)	1,694,392,000	1,580,909,000	8
9	Central Hanover (N.Y.)	1,616,750,000	1,477,219,000	9
10	First National (Boston)	1,378,871,000	1,247,973,000	10
11	Chemical (N.Y.)	1,311,719,000	1,153,998,000	11
12	National Bank of Detroit	1,220,457,000	1,140,243,000	12
13	Security-First National (Los Angeles)	1,183,410,000	1,104,741,000	13
14	Irving Trust Co. (N.Y.)	1,163,716,000	964,148,000	15
15	Bank of the Manhattan Co. (N.Y.)	1,023,929,000	974,325,000	14
16	First National (N.Y.)	1,005,699,000	942,359,000	16
17	Cleveland Trust	916,152,000	792,777,000	17
18	J. P. Morgan & Co.	799,042,000	709,019,000	19
19	New York Trust	776,837,000	689,208,000	20
20	Philadelphia National	735,906,000	710,665,000	18





ONLY THE  
*Graham*  
VARIABLE SPEED DRIVE  
GIVES YOU  
ALL SPEEDS  
FROM TOP  
TO ZERO PLUS  
REVERSE

You who are responsible for modernization of machines to compete in the post war market should investigate the Graham, because Graham alone has these IMPORTANT ADVANTAGES

- 1 Not just 5 to 1 range, or 10 to 1, or 100 to 1, but every speed to zero, forward and reverse, without stopping the motor.
- 2 Full torque guaranteed over the entire speed range.
- 3 Close speed adjustment with accurate return to pre-set speeds.
- 4 Extreme compactness, all metal, self-lubricated, no belts, no tubes, moderate price.

**Machine Builders** — Order a ½ HP Graham now to prove its advantages — use it in your laboratory as a utility all-speed test unit.

WE CAN DELIVER!

**GRAHAM TRANSMISSIONS INC.**

2706 N. Tautonia Ave., Milwaukee 6, Wis.

*Graham*  
VARIABLE SPEED DRIVE

est he pays and the higher yield on the bonds until he can sell them at a profit.

Most of the new free riding is said to have occurred outside the New York area, with both the Cleveland and Atlanta districts particularly mentioned in stories now circulating.

• **Big Sum Turned Down**—The Federal Reserve Bank at Cleveland for example, rejected over \$100,000,000 of subscriptions entered with it for such favored bank investments as the new ½% certificates and the ten-year 2's.

All these subscriptions would have been financed on bank credit by investment dealers, brokers, or individuals. They were turned down after investigation revealed strong doubts that the borrowers could pay off their loans within six months out of earnings or resources, or that the bonds were sought with the sole intention of selling them later to banks.

It seemed likely that some subscriptions were being offered in behalf of banks anxious to buy forbidden bonds at the issue price of par rather than pay premiums of ¼ of 1%, or more, for them in the open market when the campaign was over.

• **Some Encouragement**—But many of the rejected Cleveland subscriptions were inspired merely by the usual desire of the old-fashioned free rider for a sizable quick profit on a small temporary investment involving no risk.

And some banks anxious to loan surplus cash are reported to have encouraged free riding by offering to finance large purchases of such bonds as the new 2's on small margins at rates as low as ¼ of 1%.

The reappearance of the free rider is believed to have been caused by the attractive marketable issues offered, the large regional quotas set to reach the goal of the drive, and the desire of local communities to make a good showing. Probably steps will be taken in the next campaign to make things more unattractive for free riding, but the sixth drive isn't expected before late November or early December.

• **May Increase Return**—If the military picture is bright, the sixth drive may be called a "victory loan." And some banking circles feel that a "victory" long-term issue with a larger return than the 2½'s will be featured in order to make government bonds sufficiently attractive to meet the competition from private sources they will again have to face after the war.

## SUBURB TO BUY UTILITY

The first transportation venture of the late O. P. and M. J. Van Sweringen, which led the two Cleveland real estate operators step-by-step into the acquisi-



At his Washington desk, Ted R. Gamble operates machinery that has produced historic investments in War Bonds that help make history.

tion of a railroad empire (BW-Sep. 21 '35,p9), is about to become a municipally owned utility. The line is the 13-mi. Rapid Transit which the Van Sweringen brothers built to insure fast transportation between Cleveland and their booming suburban development of Shaker Heights.

The suburb's city council has voted to issue \$1,300,000 in bonds and to buy the system for \$1,250,000, leaving \$50,000 working capital. The line is owned by the Cleveland Trust Co. and the liquidators of the closed Union Trust Co. and Guardian Trust Co.

The banks, which took over the system in 1937 after the collapse of the Van Sweringen empire, hold around \$5,000,000 in notes secured by Rapid Transit, on which some \$3,000,000 in delinquent interest has accumulated.

A portion of the Rapid Transit runs along the right-of-way of the Nickel Plate R.R. In 1924, when first negotiations for this track arrangement stalled, the "Vans" bought the Nickel Plate, and used it as the first link in their projected transcontinental rail system.

Shaker Heights officials calculate that, adjusted to the municipal operation, the line will show a net operating income of about \$130,000 a year. The political subdivisions involved will lose about \$23,000 a year in taxes.

Included in the suburb's plans for the system are bus feeder lines to bring all portions of the suburb (population 26,000) within reach of the two main branches of the transit line.

# THE LITTLE FUZE WITH A BIG MISSION



These small precision timing devices made by Pollak for shells and bombs operate with un-failing accuracy and deadly effect on our foes.

THE "BRAINS" of a shell or bomb is the fuze. It can be set for detonation on contact with or above the target, or for delayed action. It is the essential control for the destruction of our enemies by artillery or bombing.

Pollak has turned them out by the million and they are in action on every front and in every battle. Each one is truly the little fuze with a Big Mission. Each one accurate—efficient—deadly.

## Pollak Facilities for War Will Be At Your Service for Peace

Some day, when peace is won and our own war work is finished the proven ability of Pollak to engineer, develop and manufacture products which, like

these fuzes, are designed right and made right—produced in volume—and delivered on time—may be of great value in your business.

### It Is Not Too Early to Ask for Designs and Proposals for Pollak

It is possible that the blueprints of your postwar production have some parts or devices which call for outside fabrication.

# POLLAK PRECISION PRODUCTS



*The original Army-Navy "E" award to this company has been renewed four times. Each of the four stars on this flag symbolizes six months of exacting service to our Armed Forces.*

*Buy More Bonds  
Than Before*

POLLAK MANUFACTURING COMPANY • ARLINGTON, NEW JERSEY

DEVELOPING • DESIGNING • MACHINE WORK • SPINNING • WELDING • STAMPING • FINISHING



**P**resent and post-war business opportunities in California command the interest of bankers and other executives throughout the country. For here is the richest, most concentrated market in the West.

It is a market served by this bank with branches in more than 300 cities and towns . . . in practically every neighborhood shopping center. It is this statewide coverage which enables Bank of America to offer an intimate, on-the-spot representation of unusual value to executives planning to develop their interests in California. Your inquiries addressed to the Business Development Department will receive prompt attention.

CAPITAL FUNDS . \$ 171,776,392.04  
DEPOSITS . . . 3,767,443,322.19  
RESOURCES . . 3,975,493,006.15  
(As of June 30, 1944)

*California's statewide bank*

**Bank of America**  
NATIONAL TRUST AND SAVINGS ASSOCIATION

Member Federal Deposit Insurance Corporation  
Member Federal Reserve System

Main offices in two reserve cities of California... San Francisco - Los Angeles

## Options on Stock

Incentive compensation plans become popular as taxes hold down executives' salaries. Treasury checks each on merits.

There isn't anything new in granting corporate officials long-term options to buy—at attractive prices—stock held in the treasury of their companies. Many concerns have used the stock option bait to secure new management blood or to retain executives whose salaries weren't of sufficient importance to turn the trick.

● **Trimmed by Taxes**—Because of the high tax rates, for several years it hasn't made much difference, financially, to many officials how large a salary their companies paid them.

For example, W. S. S. Rodgers, president of the Texas Co., had "take-home" pay of only \$34,500 in 1943 though paid a salary of \$125,000; James S. Adams, president of Standard Brands, Inc., netted \$28,461 out of his \$75,000 stipend; while J. H. Carter, president of Pittsburgh Steel, retained only \$26,243 of his \$60,000 salary.

● **Making Them Happy**—As a result, there has been more than just a faint trend lately toward keeping key officials happy by rewarding them with something other than just a raise in salary—an increase that in large part would go to the tax collector.

Last spring, for example, Sinclair Oil Corp. stockholders approved the sale, at any time up to June 1, 1947, of 150,000 shares of common stock held in the treasury to Harry F. Sinclair, company president, at a price of \$13.25 a share.

While this stock purchase agreement is in force, Sinclair has the right to make payments at his own convenience, withdraw all stock thus paid for, and is obligated to pay 3% interest yearly on the unpaid portion of the full purchase price.

● **Gets Dividends**—However, he is also to receive all dividends paid on the shares still unpurchased by him. The directors last month placed the stock on a 20¢ quarterly basis, compared with the 12½¢ dividend rate that prevailed during 1942 and 1943.

● **Paramount's Plan**—At the end of June, stockholders of Paramount Pictures, Inc., gave their approval by a big majority to an "incentive compensation plan" for Barney Balaban, president.

This plan provides for the sale of a \$2,000,000 promissory note, bearing 2½% interest, to Balaban and gives him the right to convert this note subse-



# Pressing a Button

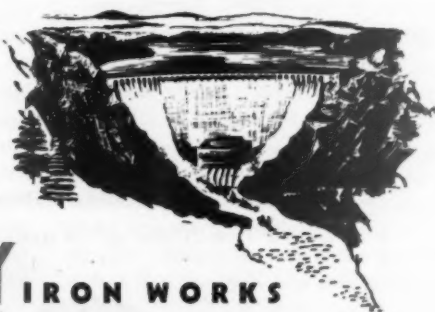
## TO SHUT A GIANT'S MOUTH!

No monstrous ogre of fable is this mighty giant—but a valued device of the engineer's craft, skillfully built to control the powerful flow of life-giving water. Built to order by Hendy for a reclamation power and water project, this ring-seal gate is one of a wide variety of special gates and valves installed throughout the West, in Latin America and in the far East.

The "giant's" mouth is an outlet 86 inches in diameter. Yet the construction of this huge gate is so precise that a 40-hp electric motor powers its closing and opening. One man operates it with a push-button control located at the master control station.

For more than four decades Hendy has built to carefully drawn engineering specifications hundreds of hydraulic flow-control units—needle valves, butterfly valves, ring-seal gates, high-pressure gates and sluice gates—for the dams and the power, water and reclamation projects of this and many foreign countries.

Submit your flow-control problems to Hendy—for recommendations based on seasoned experience.



Standing 38 feet high and weighing 105,000 pounds, this huge, ring-seal gate valve is shown prior to dis-assembly for shipment. It is one of two delivered in recent months to Puerto Rico.

**JOSHUA HENDY** IRON WORKS  
ESTABLISHED 1856  
SUNNYVALE, CALIFORNIA

Branch Offices: BOSTON • BUFFALO • CHICAGO • CINCINNATI • CLEVELAND • DETROIT • NEW YORK • PHILADELPHIA • PITTSBURGH • SAN FRANCISCO • ST. LOUIS • WASHINGTON • LOS ANGELES

Hendy  
Products

VERTICAL TURBINE & WATER PUMPS  
POMONA PUMP CO. Division

MOTORS & GENERATORS  
CROCKER-WHEELER Division

STEAM TURBINE DIVISION  
JOSHUA HENDY Division

# **"THE LARGEST OF MANY EXCELLENT BANKS IN THE NORTHWEST"**

*Statement of Condition June 30, 1944*

RESOURCES	Totals
Cash and Due from Banks . . . \$119,779,588.61	
United States Government Securities	
Direct and Fully Guaranteed 315,176,098.89	
State, Municipal and Other	
Public Securities . . . . . 25,684,039.99	
Other Bonds and Securities . . . 1,718,903.62	\$462,358,631.11
Loans and Discounts . . . . .	90,673,716.49
Federal Reserve Bank Stock . . . . .	480,000.00
Bank Buildings, Vaults, Furniture and Fixtures	1,899,554.94
Interest Earned Not Received . . . . .	1,036,416.43
Customers' Liability Under Letters of Credit and	
Acceptances . . . . .	6,082,622.91
<b>TOTAL . . . . .</b>	<b>\$562,530,941.88</b>

LIABILITIES	
Capital Stock . . . . .	\$10,000,000.00
Surplus . . . . .	6,000,000.00
Undivided Profits . . . . .	2,739,575.23
Reserves for Contingencies . . . 2,897,833.71	\$ 21,637,408.94
Reserves for Interest, Taxes, etc. . . . .	1,819,897.36
Discount Collected Not Earned . . . . .	135,948.69
Letters of Credit and Acceptances . . . . .	6,082,622.91
Deposits . . . . .	532,855,063.98
<b>TOTAL . . . . .</b>	<b>\$562,530,941.88</b>

**34 strategically located Banking Offices  
in the State of Washington**

Member Federal Reserve  
System



Member Federal Deposit  
Insurance Corp.

**SEATTLE-FIRST NATIONAL BANK**

Main Office — Seattle  
Spokane and Eastern Division — Spokane

quently, should he desire, into Par  
mount common at a price of \$25 a share  
(present market value is around \$20)  
if he remains in the company's employ  
for four years.

• **Stock for Sorensen**—Last week, Willy  
Overland Motors, Inc., stockholder  
ratified a substantial stock purchase  
option. This gives Charles E. Sorensen  
the company's new president (BW  
Jun.17'44,p84), the right to purchase  
at \$3 a share—100,000 Willys-Overland  
common, which recently sold at a price  
above \$20 on the New York Stock  
Exchange.

Sorensen's option is to extend through  
Jan. 1, 1950, and of the shares in ques  
tion 10,000 may be acquired starting  
Jan. 1, 1945, and the rest thereafter a  
the rate of 22,500 shares annually.

• **Two Factors**—How profitable these  
various types of incentive compensatio  
plans will eventually prove to the ben  
ficiaries mainly depends on such im  
portant factors as (1) the trend of the  
stock market and (2) the attitude taken  
toward each plan by the federal taxing  
authorities.

From a tax standpoint there appear  
to be some conflict in the courts on  
the subject of stock purchase option  
plans.

All decisions now hold that the me  
granting of an option, regardless of the  
option price, does not create a tax liab  
ity. However, the Treasury Dept. in a  
least one case, has successfully main  
tained the position that when an option  
is exercised, there is a tax liability if the  
current market value of the stock ex  
ceeds the option price.

• **Considered on Merits**—Income tax  
specialists admit their records disclose  
few cases where the authorities did not  
insist that profits obtained through ex  
ercise of stock purchase options had to be  
treated as extra compensation.

However, each case, it is said, is cu  
rently being considered strictly on its  
own particular merits. And the federal  
authorities are carefully examining each  
new plan to make certain that it  
hasn't been specifically designed to  
dodge taxes by temporarily substituting  
a lower-tax-bracket "long-term capital  
gain" for what is in effect an increase  
in salary, or to circumvent the present  
salary-freezing regulations.

• **A Capital Gain?**—Wall Street has  
shown particular interest in the favor  
able Willys-Overland stock option  
granted Sorensen, and it is reported that  
the plan didn't make its appearance  
until after the Treasury Dept. had re  
fused, under the existing salary stabiliza  
tion rules, to permit the company to  
pay its new president an annual salary  
of \$100,000.

Some Wall Streeters have figured out  
a way by which Sorensen would be able



## SOUP BY THE GALLON MEANS VALVES BY THE THOUSANDS

AS YOU sniff the spicy aroma of a freshly opened can of tomato soup, give a thought to the whale of a job that commercial food canning involves.

In a big food cannery, you are not cooking for a family but for a nation—you are not using pots and pans but huge cookers that can hold 500 to 1000 gallons.

To produce tomato soup in this quantity means valves, fittings, and pipe. The thousands of gallons of water that flow into the huge pressure washers where the ripe, red fruit is cleaned—the thick red juice that pours through the pulping machine—the steam that heats the giant cookers and the finished soup—seasoned to suit an epicure's palate—all flow through piping.

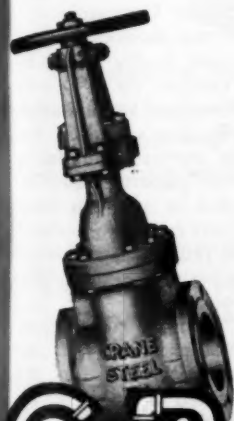
And it is Crane's job to supply piping to industry. Valves in all sizes and types for steam,



water, air, oil or process lines—pipe, fittings, unions, pressure regulators, air gauges—yes, even the gaskets, insulation and packing so essential to pipe lines.

Whether you manufacture soup or steel—paper or plastics—chemicals or varnish; whether you operate an oil refinery, a railroad or a power station, piping is important to you. Important, too, is the fact that in the Crane line you will find everything you need for every piping system.

CRANE CO., 836 S. Michigan Avenue, Chicago 5, Illinois.



# CRANE

**VALVES • FITTINGS • PIPE  
PLUMBING • HEATING • PUMPS**



# ROUSTABOUT CRANE

**The Free-Roving Tractor Footed**

● MC-4 Roustabout Crane — long handling range, fast travel with load, easy steering. Ball-bearing, running-in-oil construction.

- Loader
- Unloader
- Mover
- Carrier
- Stacker



Rear view MC-4 Roustabout Crane



MC-4 totes easily an ocean-going buoy

**For Fast, Efficient  
Low-Cost Load Handling  
You Need the MC-4**

IT KEEPS THINGS to 7½ tons moving around your plant, airport, railroad, dock. . . . It's where you need it when you want it, tireless, easy to run, low in operating cost. . . . It pays for itself quickly in saved time, manpower and expense. . . . Modernly engineered and built for years of overwork. . . . Hundreds of users say they wouldn't be without their Roustabout Cranes, keep them in daily profitable use. . . . It pays you to write for the whole story — today, now.

**THE HUGHES-KEENAN COMPANY**  
600 NEWMAN STREET • MANSFIELD, OHIO



**Roustabout Cranes**

By Hughes-Keenan

Load-Handling Specialists Since 1904

to register a "long-term capital gain" in this connection. They believe that he could do this by selling the stock short now and then withhold completing the transaction until six months hence when, under the option, 10,000 shares of the stock will be available to him at a price of \$3.

Income tax men, however, deny emphatically that it could be done that way.

## BETHLEHEM TO REFUND

Bethlehem Steel Corp., unless news from usually trustworthy Wall Street sources proves incorrect, is currently putting the finishing touches on a refunding program that is likely to rank as one of the biggest single pieces of industrial financing in years.

The operation is expected to involve retiring all the company's present convertible and serial debentures which were outstanding in the amount of approximately \$66,000,000 at the close of 1943.

However, no public financing is anticipated inasmuch as it is believed that the corporation has already completed its arrangements for selling some \$60,000,000 of new notes privately to insurance companies and other institutional investors.

Kuhn, Loeb & Co., which headed the syndicate that originally handled the public offering in 1937 of most of the bonds slated for retirement, and some associated houses are understood to be slated to act as agents for Bethlehem in the current private placement.

## COVERAGE EXTENDED

Car owners have been receiving broader insurance protection without extra charge since July 16 not only under new or renewal policies issued since then but also under policies already in effect, according to a current announcement of the National Bureau of Casualty & Surety Companies.

This extra coverage includes for every risk insured against bodily injury liability bail bond expense, up to \$100 for any one bond, if required by automobile accident or traffic law violation. The "drive other cars" coverage afforded by policies on private passenger cars has also been extended to apply to trucks and commercial cars except for automobiles not of the private passenger car type used in the business or occupation of the insured or spouse.

The medical payment coverage, included in some policies, has been extended to apply to private cars not owned by the insured or spouse in the case of certain medical charges caused by injuries sustained therein by them.

*It's true in a factory, too!*



*"I could dance all night to this music...!"*

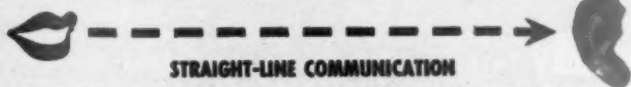
Even though you may never have set foot on a ball-room floor, you've undoubtedly known of people gaily dancing hour after hour to the stirring strains of some excellent dance orchestra ... Then try to imagine their doing so *without* music ... and you get a good measure of music's fatigue-averting powers!

We mention this fact because it has some interesting industrial applications. In many war plants, recorded music is played over the sound system as an aid in lifting morale, in making work more pleasant, and in keeping heavy production schedules rolling smoothly. Of course, music is no cure-all—improperly used, it may even be a handicap. But, rightly employed, it has proved invaluable.

Stromberg-Carlson engineers can show you how to use a sound system to carry music to your best advantage. They can also show you its many other uses ... for locating key men in a flash ... for broadcasting messages or alarms ... for putting you in immediate executive contact with every department ... for reaching instantly one man, or a thousand; in the next room, or a mile away. Consult the classified section of your telephone directory

for the name and address of your local Stromberg-Carlson Sound Equipment distributor, or write for Booklet No. 66, Sound Equipment Division of the Stromberg-Carlson Company, 100 Carlson Road, Rochester 3, New York.

**STROMBERG-CARLSON**



STRAIGHT-LINE COMMUNICATION

SAVES MANPOWER • SPEEDS THE WORK TO VICTORY

# HOW AN ELECTRIC TRUCK *Saved Manpower and Money*



## Modern Material-Handling Methods Suited for Most Industries

● Many executives have solved the problem of manpower shortage and reduced hazards of materials handling by using battery electric trucks. They have gained permanent savings from which they will benefit in postwar competition.

Take the case of the plant where 6 men worked 9 hours to unload and store a carload of lumber. Boards were removed from freight cars by hand and placed on a gravity roller conveyor. This equipment carried the lumber to the storage area where the boards were again unloaded and piled by hand.

The management simplified this job by having lumber shipped to them in unit loads and by employing a battery electric fork truck.

Now one man and a truck in only 8 hours do what was formerly a 54-hour job, saving \$73.00 for every carload handled.

These methods can effect similar benefits for most industries. We invite your inquiries.

To keep abreast of latest developments:

**FOR MANAGEMENT:** "Unit Loads" Bulletin explaining a coordinating materials handling system that is applicable to almost every industry.

**FOR TRANSPORTATION SUPERVISOR:** "Material Handling" Handbook containing vital information necessary to the conduct of efficient inter-department operations.

We can supply action photographs of electric trucks for reproduction in advertisements, trade papers and other publications.

**THE INDUSTRIAL TRUCK STATISTICAL ASSOCIATION**  
208 South La Salle Street • Chicago 4, Illinois



MANUFACTURERS OF TRUCKS: AUTOMATIC, BAKER, CRESCENT, EASTON, ELWELL-PARKER, LEWIS-SHEPARD, MERCURY, YALE... BATTERIES: EDISON, EXIDE, PHILCO... BATTERY CHARGING EQUIPMENT: ELECTRIC PRODUCTS, HERTNER

## WAR BUSINESS CHECKLIST

A digest of new federal regulations affecting priorities, price control, and transportation

### Increased Civilian Supply

The number of types of farm machine and equipment that are rationed have been reduced from 31 to 19 by Supplement Order 1 (Revision 2) to War Food Order 14. . . . Since military requirements for balsa lumber are declining, WPB has relaxed restrictions on this wood to permit sale on purchase orders rated AA-5 or better and has removed restrictions on the sale of balsa scrap (Order M-177, as amended). . . . Beginning July 1, farmers east of the Rockies will be able to get a limited supply of cyanamid for direct application to crops, WPB has promised.

### Relaxation of Priorities

Under an amendment to WPB Order M-339, makers of printing plates may increase their use of zinc sheet from 60% to 100% of the amount used in the corresponding calendar quarter of 1941 to 100%; controls on copper in printing plates remain general as they were, though sheet copper in the hands of suppliers on Dec. 31, 1942, is released for use in making copperplate engravings. . . . Thanks to the decreased military demand for glycol ethers, the small-quantity exemptions for these ethers are substantially raised by Schedule 36, WPB Order M-339. . . . By revoking Schedule XI of Order L-217, WPB has removed restrictions on the sizes in which bituminous distributors may be manufactured and on minimum capacity specifications for bituminous distributor pumps. . . . The use of copper and copper base alloys is now permitted in fire protective, signal, and alarm equipment and restrictions on the distribution of this equipment are relaxed by amendment to WPB Order L-39.

### Used Machine Tools

The Surplus War Property Administration has announced a price policy for the disposing of government surplus used machine tools. The formula established for standard general-purpose tools, policies affecting special types will be announced later. For tools that are not held in the purchaser's plant, the depreciation allowed on the original price of the tools will be 15%, 24% a month for the first six months, 1% a month for the next four months, and less 0.8 of 1% for the next 26 months. When the purchaser has the tools in his own plant, the price will be five percent higher since there will be no freight charge and the purchaser will know the exact condition of the tools he is buying. The price policy is based on the machine tool manufacturer's original price (including electric



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ar's demands for weapons built to  
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ickness of a shadow," taught pro-  
cers many lessons. Most of these will  
applied to postwar consumer goods  
higher quality at lower cost.

Air Conditioning's contribution is  
e of these lessons. It will be used in  
ging rooms, in many manufacturing  
ocesses, even in complete plants for  
added benefits of better employe  
alth and efficiency.

That's why so many of your com-  
itors have their plans on the drawing

boards, today. Undoubtedly you have  
too, or will soon. But be sure they in-  
clude Modern Air Conditioning.

Modern Air Conditioning means  
Westinghouse—and its years of pioneer-  
ing research and engineering experience.

For essential war uses in factories,  
hospitals, airports, military bases, etc.,  
Westinghouse Air Conditioning and  
Industrial Refrigeration Equipment is  
available today.

For executives, architects and engi-  
neers now planning postwar build-  
ing and modernizing, dependable data

and competent application engineering  
assistance are ready.

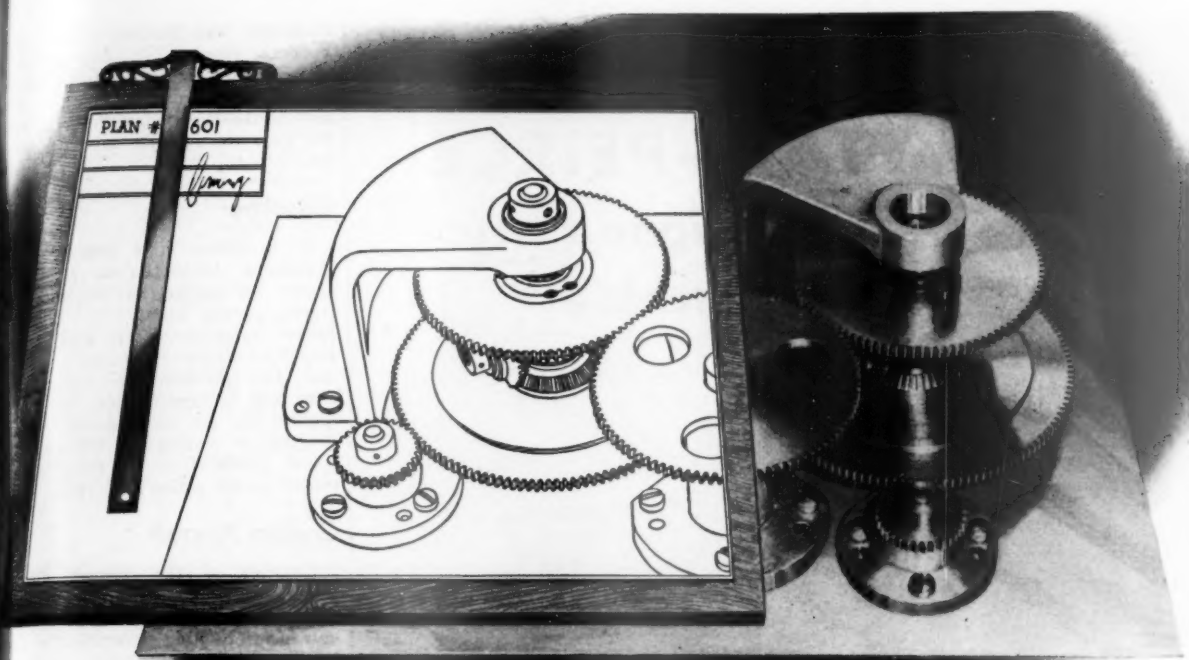
Phone your nearest Westinghouse  
office, or write on your letterhead to  
Westinghouse Electric Elevator Com-  
pany, 150 Pacific Avenue, Jersey City 4,  
New Jersey.

#### HERMETICALLY-SEALED FOR DEPENDABILITY

Westinghouse pioneered the Hermeti-  
cally-Sealed Compressor. Hermetically-  
sealed means light weight • small  
size • low maintenance and operating  
costs • high efficiency • long life.

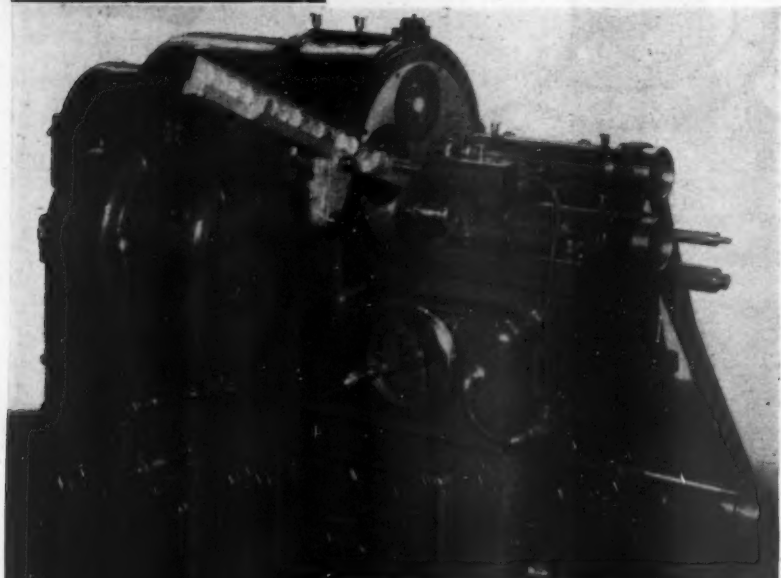
**Westinghouse**  
PLANTS IN 25 CITIES . . OFFICES EVERYWHERE  
*Air Conditioning*

Westinghouse presents John Charles Thomas • Sunday 2:30 E. W. T., N. B. C.  
"Top of the Evening" • Mon. Wed. Fri. 10:15 E. W. T., Blue Net.

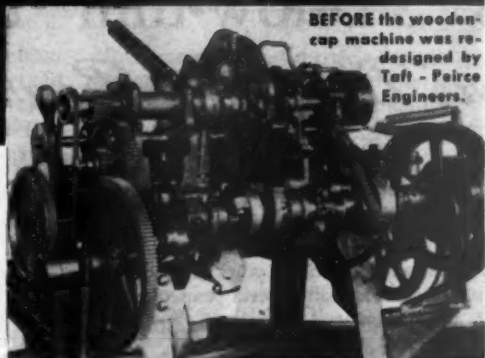




## "Here's how TAFT-PEIRCE redesigned my machine"



AFTER the wooden-cap machine was redesigned by Taft-Peirce engineers. Transformation complete, inside and out!



BEFORE the wooden-cap machine was redesigned by Taft-Peirce Engineers.

This manufacturer's machine, which made wooden caps and closures for bottles and containers, was getting left in the ruck by newer and more versatile machines which could produce plastic caps in quantity and in color. So he decided to pack up his trouble and *Take It To Taft-Peirce*.

Taft-Peirce Contract Service engineers redesigned the old machine from the ground up, gave it new efficiency, modern appearance, far greater capacity and finer quality of product.

This is one of hundreds of chapters in the case-book of the Taft-Peirce Contract Division, covering everything from the design of a single tool or part, to the design, tooling, and production of complete machines in quantity. *The Taft-Peirce Mfg. Co., Woonsocket, R. I.*

FOR DESIGN, DEVELOPMENT, TOOLING, CONTRACT MANUFACTURING

Take it to  Taft-Peirce

equipment and standard accessories) builder's plant. The depreciation period is fixed from the date a machine originally put in use to the date of termination of the lessee's facilities contract or the time the machine is withdrawn from use.

### Gasoline

U. S. refiners have been requested by the Petroleum Administration for War to change the specifications for household regular gasoline from 72 to 70 octane as a further emergency step to meet heavy military demands for 100-octane aviation gasoline. This reduction in the amount of tetraethyl lead in regular grades will affect quality, but not the quantity, of gasoline available to civilians. It will add an estimated 2,000,000 lb. of tetraethyl lead a month to the nation's stockpile.

### Civilian Aircraft

Controls of the Aircraft Production Board have been extended by WPB to include all types of civilian aircraft, instead of only planes of 500 horsepower or less, as before. Engines, propellers, gliders, frames, and training devices are covered by the amended order, which is designed to provide a simple procedure for meeting essential civilian requirements without diverting military production to fill civilian orders. Permission to manufacture civilian planes must be requested of WPB in writing, and must be accompanied by an application on Form CMP-4B. The order, in addition to forbidding the manufacture of all aircraft except as authorized, forbids with some exceptions the transfer of aircraft or other aircraft products or parts which have had less than 100 hours flight time, and forbids the transfer of new training devices or those which have been operating for less than six months. Prototype aircraft and aircraft products may be manufactured, and will be assigned preference ratings and allotment symbols under Preference Rating Order P-43. Production of military schedules approved by the Joint Aircraft Committee and APB is not subject to this order. (Order L-48, as amended.)

### Cotton Linters

Because of increased military requirements for smokeless powder and for tenacity rayon tire cord, producers of cotton linters will again be required, beginning Aug. 1, to set aside a percentage of their output that is acceptable for chemical use for delivery to Commodity Credit Corp. The new ruling fixes the set-aside quota at 10% of such output. Producers had previously been ordered to hold 65% of their production for CCC until Feb. 1, 1944, when the set-aside requirement was rescinded.

### Newsprint

Though only recently authorizing manufacturers of newsprint weighing under 30 pounds (BW-July 1, p. 79), WPB has now announced that Newspaper Publishers Industry Advise-

Committee has adopted the recommendation that the 30-lb. weight newsprint be eliminated by all U. S. newspaper publishers. On the basis of a special report prepared by a subcommittee, it has been recommended that any 30-pound newsprint in a publisher's inventory be consumed on the same basis as 32-pound newsprint, regardless of any cut that publishers who ordered the 30-pound paper might be required to accept under Order L-240.

## Work Clothing

To increase production of essential civilian work clothing, WPB has issued a new order requiring manufacturers of such apparel to produce in each calendar quarter, beginning July 1, at least 90% of the number of units manufactured during the base period (the third quarter of 1942). Any of the listed items that have been discontinued must be put back into production. Items affected are men's and boys' bib overalls, men's and boys' dungarees, men's and boys' shirts, men's one-piece work suits, men's and boys' work pants, men's overall jackets—or jumpers—and men's blanket-lined coats. (Order M-379.)

## Maternity Dresses

In line with the program to stimulate production of low-priced essential clothing items (BW—May 13'44, p45), WPB Order M-328B has been amended to provide for the manufacture of inexpensive maternity dresses and slips, for production and distribution during August and September of this year. Prices for these items will be announced shortly; types of garments, amount of material, and standards of construction are prescribed in the order. Manufacturers who wish to take part in the program should apply on Form WPB-3732. Those whose applications are approved will be given priority assistance in getting materials.

## Petroleum

As a result of an agreement between the Petroleum Administration for War and WPB, PAW may now authorize construction projects for the petroleum industry when the costs do not exceed \$100,000. Previously, PAW had such authority over only those projects which did not cost more than \$25,000.

## Turkeys

American armed forces will have their turkey dinners again this year on Thanksgiving, Christmas, and New Year's Day, as a result of a War Food Administration order requiring all turkeys produced and marketed in specified states to be held for this purpose until the quantity needed is obtained. (WFO 106.)

## Gasoline Rationing

To stop the flow of gasoline coupons into the black market, OPA will permit operators of fleets of official or commercial motor vehicles to use checks on a ration

Throughout industry and the Armed Forces as well as in the home, housekeeping has become a real problem. With competent workers harder and harder to find, cleaning must be done by more efficient equipment.

In a wide variety of manufacturing plants and maintenance shops—both for industry and the military services—Kerrick Kleaners are saving up to 80% of the manhours normally required for cleaning equipment and parts. These efficient cleaners remove dirt and stubborn grease from motor vehicles, airplanes, machinery, floors—everything from tiny precision parts to complete factories.

Heat, water, detergent and friction are scientifically combined in Kerrick Kleaners to remove dirt from all types of surfaces... faster, better and cheaper.

Kerrick Kleaners had years of successful experience in automotive and industrial cleaning to get ready for their present war assignments. They will again be available, in stationary and portable models, for most efficient steam cleaning.

Other Clayton products serving the Armed Forces include: Flash Type Steam Generators—Hydraulic Dynamometers—Hydraulic Liquid Control Valves—Boring Bar Holders and Boring Bars.



This illustration shows portable Model L-OEP

**CLAYTON**  
MANUFACTURING CO.





Map Showing Division of Country into Districts  
for the Service of our Customers



## In Every State

**T**HIS BANK has customers in every State. For their convenience and service, the official staff of the Bank is so organized that special groups of officers are in close touch with the business of these customers in various sections of the country.

This enables us to make our complete facilities of the greatest possible value to customers, with due regard for their local banking connections, and it affords the experienced and continuous individual service that is so desirable.

## Guaranty Trust Company of New York

Capital Funds, \$296,000,000

140 Broadway  
New York 15

Fifth Ave. at 44th St.  
New York 18

Madison Ave. at 60th St.  
New York 21

Member Federal Deposit Insurance Corporation

bank account instead of coupons handed over by the drivers at the time of transfer. Only fleet operators who use 960 gal. of gasoline or more a month, and those who buy on monetary credit under PAW Directive 62 are eligible for this plan, and only such gasoline dealers and distributors are eligible to make these sales on ration credit as have been designated individually by the operators. (Amendment 134 to Ration Order 5C.)

### Containerboard

A new distribution program for containerboard has been set up by WPB to insure a sufficient supply to meet the need for V-boxes and to satisfy civilian requirements for domestic boxes. Allocations for V-boxes will be made monthly, instead of quarterly. Containerboard for other than V-boxes will be allocated on a quarterly basis and will be authorized under two classifications: on basic authorizations, which will permit the acceptance of a specific amount of containerboard, and on incentive authorizations, which will be issued to containerboard consumers whose rating patterns are higher than average. No manufacturer may fill orders certified by incentive authorizations in any calendar quarter unless he has filled V-board orders, basic authorization orders, and certain small delivery orders amounting to at least 95% of his proposed production of containerboard for that quarter. Limitations on inventory, as well as on the uses of authorized containerboard, are also designated in this WPB amended action. (Order M-290, including Interpretation 1, as amended.)

### Surgical Instruments

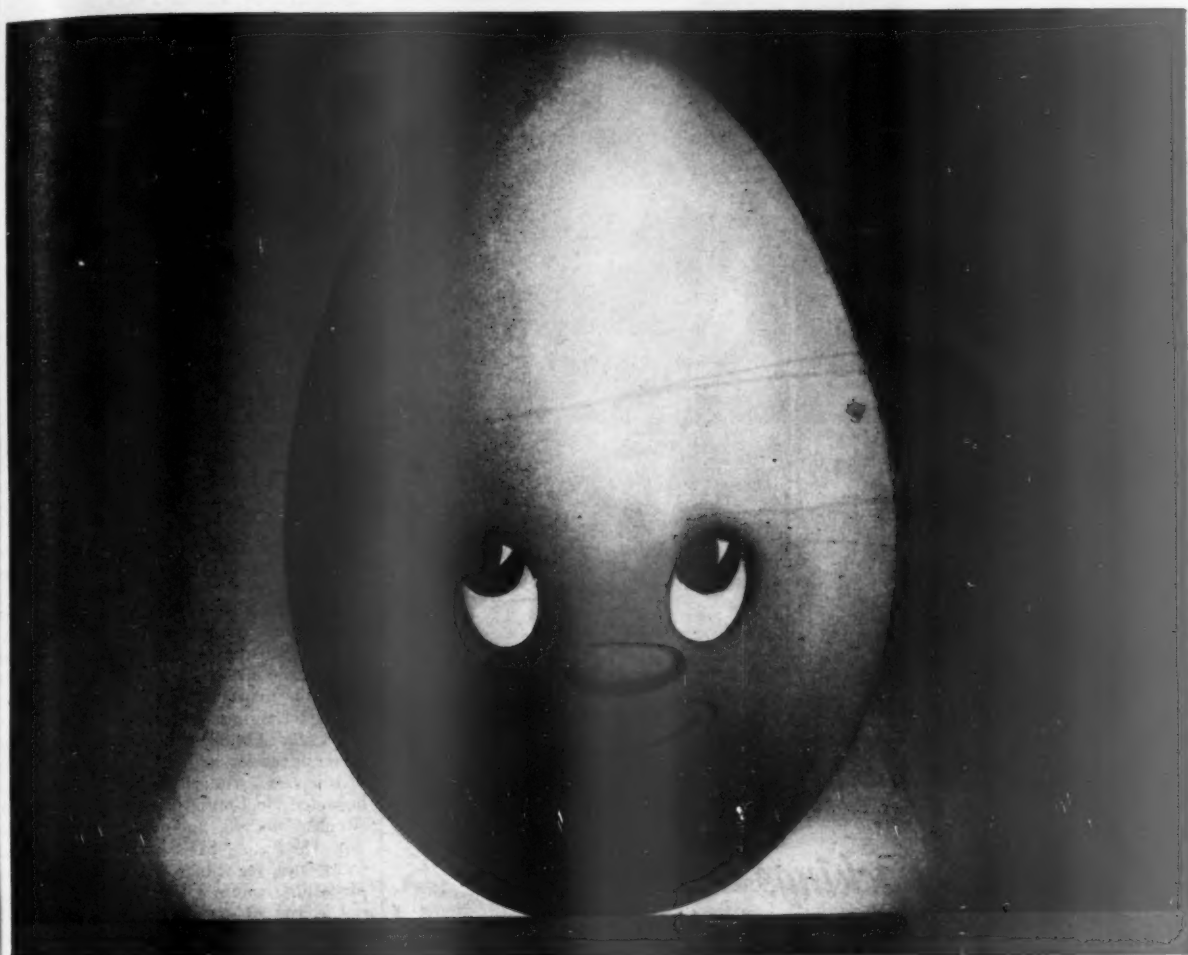
Manufacturers of surgical, dental, and optical instruments may apply for individual adjustments in the maximum prices for their products. This OPA amendment is designed to take care of local shortages of these instruments. (Amendment 37, Regulation 188.)

### Sugar

Shepherders who spend long periods in isolated range areas may have an extra pound and a half of sugar a month. OPA points out that herders, who must carry their supplies with them when they go on the range, use large quantities of cereals and grain foods, and require a larger supply of sugar than they are able to get with their sugar stamps. (Amendment 32, Revised Ration Order 3.)

### Fruits for Alcoholic Products

As a result of prospective large crops of deciduous and citrus fruits, the War Food Administration has taken action affecting the use of certain fruits and of lower grades of other fruits in making alcoholic products. Up to and including Aug. 31, fruits released are dates, pineapples, gooseberries; apricots, plums, pears, and peaches below U. S. No. 2 grades; all California cling peaches; early apples from outside California below the utility grade. Concord grapes are released



## "So I'm too Fresh, eh?"

"Well, my ancestors were fresh.

"But only for a short time.

"I'm a good egg all the time. Why?

"Clean living in dry, cold air . . .

"Traveling in refrigerated 'Carriers'...

"I see the world.

"I might even meet a mess sergeant, some day.

"Isn't this modern cold wonderful?"

Indeed, modern cold is changing our way of life.

From eggs, to soups, to nuts, we are enjoying a revolution. Its other name is refrigeration . . .

*Food can travel 'round the earth, if it is refrigerated.*

*Food can last for years . . . if it is quick-frozen.*

*Food can keep more of its vitamin content . . . if held at low temperatures.*

No wonder refrigeration and air conditioning now affect three-fourths of our diet!

Modern scientific refrigeration is, of

course, air conditioning brought down to low temperatures . . . Clean, dry cold air . . . in motion.

Did Carrier engineers foresee all this, a generation ago, when they created air conditioning? Perhaps not. But one of their first applications was food processing.

Today the Carrier organization is linked to your family table in a thousand ways. And tomorrow Carrier will make many new contributions . . . to you . . . and to yours . . .

CARRIER CORPORATION • Syracuse, New York

AIR CONDITIONING

**Carrier**



REFRIGERATION



## TARGETS FOR TOMORROW

***In Leather Packings***—Yesterday the biggest job was winterization of planes, to assure proper functioning of shock struts and other hydraulic aircraft mechanisms. That job was done, and done well, by Houghton's VIM Leather Packings.

Tomorrow the target is the rapidly increasing use of hydraulics in industry. Wherever fluids must be sealed, VIM Leather Packings will do it better, last longer, withstand higher pressures, and minimize machine down-time caused by packing failure.

So in briefing your targets for tomorrow, include in your machine design a well engineered application of VIM Leather Packings—"V", "U", Cup or Flange types. Our engineers are ready to help you with such designs. Ask The Houghton Man when he calls, or write—

**E. F. HOUGHTON & CO.**

303 W. Lehigh Avenue, Philadelphia 33, Pa.

INDUSTRIAL OILS AND LEATHERS

to individual wineries in a quantity not greater than 80% of the quantity the winery used for wine during the 1942 season. Fruits and berries the use of which in products containing 7% or more of alcohol by volume was restricted by the original order may be released under certain conditions. (WFO 69, as amended.)

### Other Price Actions

Processors of margarine who wish to increase their maximum prices to compensate for changes in formulas must apply to OPA under Amendment 28, Regulation 53, and Amendment 28, Supplementary Regulation 15. . . . Revised OPA Regulation 156 reduces prices of all **canned meat** by about 10% of the cost of the meat raw material ingredients. . . . Since a larger proportion of coconut oil is being sold in less-than-carload lots than was formerly the case, OPA has established container differentials for sales of these smaller quantities by Amendment 29, Regulation 53. . . . OPA has ruled in Amendment 19, Regulation 329, that farmers' cooperatives are under maximum price control whether or not they take title to the milk of their patrons; this applies only to cooperatives that were exempt from price control as producers under Regulation 329. . . . Two OPA actions establish manufacturers' maximum prices for metal springs, constructions, and accessories for upholstered furniture, and set three prices for sales of inner constructions of sofa beds, studio couches, and other upholstered dual-purpose sleeping equipment. (Regulation 548, and Order 1849, Regulation 188.) . . . Sales of the major canned fruits and vegetables by home packers or processors, whose total annual output does not exceed a specified amount (from 500 to 1,500 quarts) are exempt from price control under Amendment 7, Regulation 493; Amendment 5, Regulation 232; Amendment 3, Regulation 498; Amendment 31, Regulation 306; Amendment 67, Revised Supplementary Regulation 1.

### Other Priority Actions

To save paperwork and provide more uniform control of chemicals, WPB has revoked Order M-331 and has transferred allocation control of urea and melamine aldehyde resin and of urea and melamine aldehyde molding compound into separate schedules of Order M-300, at the same time raising the small order exemption of urea and melamine aldehyde resin from 1,000 to 10,000 lb. . . . Processors of industrial wiping cloths are required by amendment to order L-312 to set aside 66 2/3% of their production for military orders, instead of 25%, as the regulation hitherto provided. . . . Retailers and box jobbers are being granted priority ratings for the purchase of a limited number of standardized overseas gift boxes to be available for the Christmas mailing period. . . . WPB Order L-2394 brings paper milk containers under allocation control by limiting manufacturers to 100% of the paper and paperboard used for this purpose during the fourth quarter of 1943 and by establishing inventory restrictions on these containers.



# GOVERNMENT SAYS CONSERVE FUEL

WASHINGTON, May 5 (AP).—The committee said the 1000 would be used along with the fuel already set aside by the government.

## TODD SHOWS YOU HOW . . .

It's your wartime duty to conserve fuel. You can combine duty with smart business by modernizing your boiler room with TODD combustion equipment.

TODD oil or gas burners cut fuel consumption and maintenance charges, yet increase the production of power and heat. *TODD burners reduce the cost of a pound of steam!*

Think what this will mean after the War when your competitors put emphasis on price.

Already, many factories, commercial buildings and power houses are enjoying low-cost steam production with TODD oil or gas burners. Fuel

savings as high as ten percent—and even larger increases in heat and power production—are being reported regularly.

Now is the time to survey your boiler plant . . . while fuel conservation is a wartime "must" . . . while power production is at a premium . . . while your postwar plans are being developed. TODD engineers will be glad to make an impartial study of your entire heat and power setup—without obligation.

Act now to help your government conserve fuel . . . and help yourself to lower operating expenses by reducing the cost of a pound of steam!

### TODD SHIPYARDS CORPORATION (COMBUSTION EQUIPMENT DIVISION)

601 West 26th Street, New York 1, N. Y.

NEW YORK \* BROOKLYN \* HOBOKEN \* BARBER, N. J. \* SE. PORTLAND, ME.  
GALVESTON \* HOUSTON \* MOBILE \* NEW ORLEANS \* LOS ANGELES  
SAN FRANCISCO \* SEATTLE \* TACOMA \* BUENOS AIRES \* LONDON

ON THE FIRING LINE OF AMERICA'S WAR PRODUCTION FRONT



# PRODUCTION

## Battle of Waves

Lake shippers look to radar for protection against nature's hazards. Losses are cut now by radiotelephone.

The Great Lakes shippers, already equipped with the nonmilitary world's most extensive and closely knit radiotelephone system, are exploring radar as further protection against the peculiar perils that beset their vessels.

• **Would Cut Losses**—Postwar utilization of the principle of rebounding radio waves to warn of obstacles ahead is regarded as certain to reduce the losses of men and ships so frequently exacted by the blinding fogs of early spring.

The radar system is expected to minimize the danger of collision even as the radiotelephone has helped reduce the hazards of wind and current. Barely ten years old, the ship-shore telephone system has been developed to the point where it keeps 580 vessels in constant touch with each other, home offices, Coast Guard stations—any point with a telephone.

• **Leading Contender**—More than 400 of these vessels are served by the Lorain County Radio Corp., a small independent whose engineering sagacity and emphasis on service have made the giants in the field step lively.

President of the company is Herman E. Hageman. His mettle is indicated by the fact that he is also president of the Lorain County Telephone Co., one of the few remaining independents.

Its main shore station is at Lorain, Ohio, 30 mi. from Cleveland, headquarters of 85% of the Lakes steamer lines. Land toll charges are thereby low.

• **Serves All Lakes**—This station communicates, on 2, 4, 6 and 8 megacycles, with ships on all five of the Great Lakes. Another station at Duluth reaches, on 2 and 4 megacycles, ships and ports on Lake Superior. A third at Port Washington, near Milwaukee, operates on 2 and 4 megacycles also for service to Lake Michigan ships and ports.

Ship radiotelephone sets, which are in effect miniature broadcasting stations, have six frequencies, one in each of the four bands, one 2-megacycle safety frequency and one 2-megacycle ship-to-ship frequency.

Because the sets are operated by navigation officers generally unskilled in radio, fully automatic equipment has been

developed. Lifting the handset of an instrument, quite similar to a dial telephone, starts a transmission dynamotor and prepares the channel selection.

• **Dials Like Telephone**—The channel appropriate to distance and conditions is selected by dialing two digits, and the land call is placed with the shore station operator. All calls relate to traffic or safety, personal calls being ruled out for the duration.

The Lorain company handled 72,533 ship-shore calls last year. Its Lorain station has positions for six operators. Calls cost 75¢ station to station, 90¢ person to person. Long-distance toll charges on land are not included.

A six-frequency ship station costs about \$2,500, installed. Usually sources

of interference on board must be eliminated. There is a flat monthly charge of \$25 for maintenance. It includes monthly inspection, and dispatch of a serviceman upon the report of trouble.

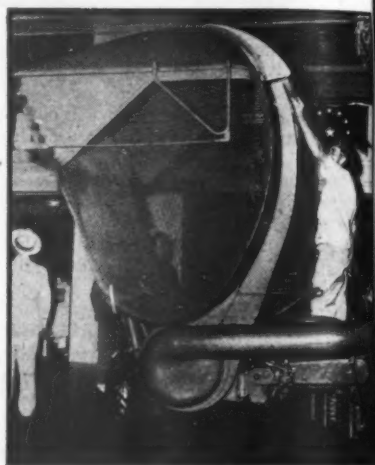
• **Reports on Weather**—Ship-to-ship calls are free. There is no method of metering them, but they are estimated to total more than the ship-land calls. Shipmasters call each other frequently with queries on wind and current conditions, other matters of schedule and navigation.

Weather reports are broadcast at frequent intervals throughout the day, and the Weather Bureau maps the Lakes from data supplied by the shippers.

• **Several Operators**—The Michigan Bell Telephone Co. operates a station at Detroit, primarily for Detroit River traffic. Illinois Bell has a station at Lake Bluff, near Chicago. Central Radio Telegraph Co. has one at Rogers City. Mich. Radio Marine Corp. of America

## PICKER AND STRIPPER

For the 400 technicians, planters, and scientists at the fifth annual Cotton Research Congress in Dallas, Tex., last week, mechanical cotton pickers provided common interest. Among the exhibits were International Harvester's self-propelled job (below) and a relatively new stripper (right) that's attached to a tractor. One of the first in the field, International's picker is designed to harvest bolls as they ripen (BW—Nov. 27 '43, p69); the stripper operates in the fall, picking all bolls after they ripen. Successfully tested in the Lubbock and Littlefield areas of Texas last year, the stripper is now in small-scale production by Great Na-



tional Air Conditioning Co., Dallas. Volume production is expected to bring its ultimate cost below \$1,000.





## "What! You haven't heard about Harold Thomas and ME?"

Well. It's quite a story.

It was back in '39 Mr. Thomas first came a-calling. He came in his official capacity, of course. As Head of the Centaur Company, makers of Fletcher's Castoria.

He liked me from the start. Because, you see, I'm a typical Cosmopolitan reader and he *still* calls on me in the pages of Cosmopolitan.

**Here's why he likes me . . .**

I'm young! The majority of Cosmopolitan readers is under 35!

That makes us young enough to

have young children—of which I have two pips! So far.

It also makes me young enough to be pliable when it comes to forming brand preferences. Young and alert enough to want to TRY what looks like the best buy.

And once I've tried it—I've plenty of years ahead to *stay with it!*

**Some story! Huh?**

Almost as good as the terrific stories that keep me shelling out 35¢ each and every month for Cosmopolitan.

Aren't they the smarties, though—those Cosmopolitan people?

They really do pull us young ones in! And hold on to us!

**And it's all true!**

So how about your telling *your* story to me? Honest. I'm the readingest, buyingest girl you ever did meet!

See for yourself.

**Cosmopolitan Readers are YOUNG!**



Cosmopolitan is where you'll find that whopping high percentage of us under-35's.

**Cosmopolitan Readers have MONEY TO SPEND!**



Always have had—they have now—and you can expect them to have it in the future!

# Cosmopolitan

**GREAT WRITING MAKES GREAT READING!**





### **TODAY:**

Gaylord Boxes are being used for the shipment of all kinds of foods, ammunition, and war supplies to our fighting forces both at home and overseas. The protection required for such shipments calls for extra strength and durability in both corrugated and solid fibre boxes.

### **TOMORROW:**

These same materials, with their extra strength and durability, their greater resistance to wear, water, and puncture, will be available to more of our friends for domestic as well as export use.

## **GAYLORD CONTAINER CORPORATION** **General Offices: SAINT LOUIS**

CORRUGATED AND SOLID FIBRE BOXES... FOLDING CARTONS  
KRAFT GROCERY BAGS AND SACKS... KRAFT PAPER AND SPECIALTIES

New York • Chicago • San Francisco • Atlanta • New Orleans  
Seattle • Tampa • Detroit • Portland • Los Angeles • Indianapolis  
Houston • Minneapolis • Dallas • Jersey City • Appleton • Oakland  
Memphis • Fort Worth • Cincinnati • Oklahoma City • Greenville  
Columbus • Jacksonville • Des Moines • Kansas City • Milwaukee  
Bogalusa • Weslaco • St. Louis • New Haven • San Antonio

**BUY MORE WAR BONDS**

operates a station at Buffalo, and the Canadian Marconi Co. has seven stations in the Lakes region. A big percentage of the calls go through Lorain, however.

A technical pioneer since the first ship set was installed in 1934 on the Steamer William C. Atwater, the Lorain company has devised a selective ringing system to replace the earlier tone-calling. With the latter the ship being called was indicated by a combination of long and short tones on the loudspeaker, usually corresponding to the ship's "whistle signal" assigned to it for purposes of identification.

• **System Is Improved**—As installations continued, the number of ships on the "party-line" grew so numerous that listening to the constant ringing was an onerous chore. The present selective system rings the bell only on the wanted ship.

Other technical improvements include voice terminal equipment that eliminates interference, and provides privacy for the speaker, and a lockout device which prevents starting the transmitter on certain frequencies when the presence of a short station carrier on the associated receiving frequency indicates that the channel is in use.

## **Packard's Plan**

Aircraft engine research on large scale is planned with Army's cooperation. Auto maker to stay in field after the war.

Packard Motor Car Co. has moved into the aircraft engine business to stay, giving the Detroit company a third arrow in a quiver which already included motor cars and marine engines.

• **Toledo Plant Enlarged**—Packard will do aircraft engine development work underwritten by the Army Air Forces. Announcement of the program, which played down the AAF position, quoted George T. Christopher, Packard president, as saying that the project "need not be considered temporary."

The work will be done at Toledo, where manufacturing has been under way since last summer on parts for the Rolls-Royce Merlin engine produced by Packard at Detroit. The Toledo plant's Defense Plant Corp. contract has just been increased \$1,350,000, bringing the total to \$8,750,000.

• **Fully Equipped**—The Toledo facilities, when completed, will be one of the relatively few fully equipped engine test centers in the country.

They will include propeller test stands, dynamometer test cells, high-

altitude pressure chambers, and laboratories in which several hundred skilled technicians will work.

**More Speed, More Power**—The exact work to be undertaken by Packard was not described other than that it would be "advanced development, bettering aircraft engine performance by increases in horsepower, speed, and endurance, and by a reduction in weight."

The deal is one of the first indications that the AAF is thinking beyond the war. However, it has been believed in technical circles that Washington has previously asked other engine makers to plan to continue their development programs under federal auspices after victory.

## Sundial Compass

**Ingenious shadow gadget is used to correct magnetic and radio compasses on B-17 while bomber is in flight.**

The principles of the old-fashioned sundial have been incorporated in an ingenious shadow compass developed by the Boeing Aircraft Co. to check variations in the magnetic and radio compasses on Flying Fortresses.

**Used for Checking**—It is necessary to know the latitude and longitude in which a bomber is flying and the exact time of day in order to compute the heading of an airplane. From this information and from the readings of the

shadow compass, the airplane's other compasses can be adjusted accurately.

The new gadget is a simple affair consisting of a piece of round, flat glass, marked in degrees, in the center of which is mounted a long, slender pin.

**• Small Margin of Error**—The assembly is mounted under the Plexiglas astrodome of the Flying Fortress, with the pin pointing upward. The shadow cast by the pin on the graduated glass disk makes it possible to compute the true direction of the bomber in relation to true north. Magnetic attractions do not affect the shadow compass and the range of error is limited to from 0.2 to 0.5 deg.

The degree markings on the glass disk are on the bottom side so the compass can be read from inside the airplane.

**• One Limitation**—Use of the new shadow compass permits calibration of airplane compasses while the plane is in flight and while all equipment which might affect the magnetic and radio compasses is in operation. Only limitation, of course, is that readings can be taken only when the sun is shining.

The shadow compass is suspended in a practically frictionless gimbal so that it remains level even though the bomber is banking, climbing, or descending.

**• Circle on Field**—Flying Fortress compasses previously were checked on a "compass rose," which consists of a circular area laid out on Boeing Field at Seattle, Wash., with compass degrees marked on the edge of the circle. The bomber then was placed in the center of the circle and turned as readings were taken from the plane's compasses and compared with those on the "compass rose."

This method did not simulate actual flying conditions, and compensations determined in this operation were not entirely satisfactory.

**• Used for Correction**—Every Boeing B-17 that takes to the air does not have a shadow compass. It is not standard equipment and is only clamped into position when it is necessary to correct variations in the magnetic and radio compasses.

## LIGHTWEIGHT HOPPER CARS

Aluminum railroad hopper cars—the first ordered by any railroad for regular freight service—are to be built in the South St. Louis plant of American Car & Foundry Co. for Missouri Pacific Lines.

Bodies of these 25 cars will be of aluminum alloy, except center sill and bolster which will be made of steel. Each car will weigh about 37,100 lb. against 50,100 lb., the average weight of conventional steel hopper car of 70 tons capacity. Aluminum Co. of Amer-



## Minutes to learn

This man is reading the simple directions, "Instructions to complete a Swinging Bracket Jib Crane." All the parts, except the I-beam (which can be purchased locally), come in the one box marked 'Budgit' Crane Assembly.

In a few minutes he will learn all he needs. In one hour, using only a wrench, without drilling a single hole, he will complete the crane.

And that is the new, revolutionary way of acquiring a crane quickly even in these times.

Should his Company need a top-running Bridge Crane, he can take another 'Budgit' Assembly—and an I-beam and shaft obtained locally—and again, in one hour, the new crane will be ready to operate.

Transportation costs are low because the heavy I-beam and shaft can be bought near you. With correct priority, quick shipment can usually be made.

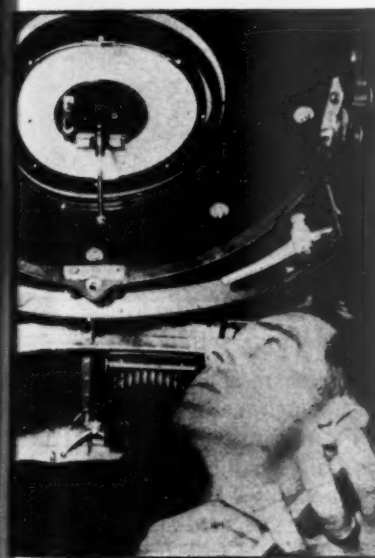
Ask our nearest Distributor to give you all the facts about 'Budgit' Crane Assemblies or write to us for Bulletin 355, which contains detailed information about the various types of 'Budgit' Crane Assemblies.



**'BUDGIT'**  
Crane Assemblies

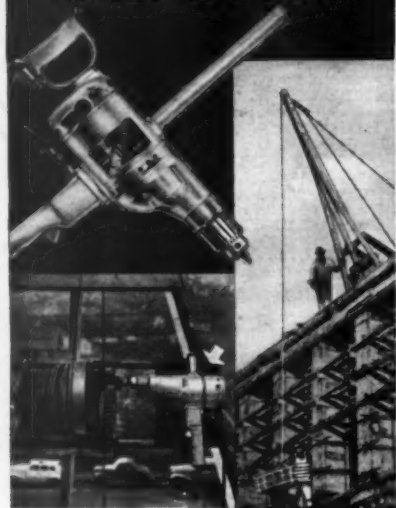
MANNING, MAXWELL & MOORE, INC.  
MUSKEGON, MICHIGAN

Builders of "Shaw-Box" Cranes, "Budgit" and "Load Lifter" Hoists and other lifting specialties. Makers of Ashcroft Gauges, Hancock Valves, Consolidated Safety and Relief Valves and "American" Industrial Instruments.



A glance at the simple new sundial compass and a few calculations provide an accurate check on a plane's intricate directional instruments.

★ THE  
POWER OF THIS  
**SKILSAW**  
**DRILL** *lifted*  
**HALF-A-TON!**



● Chances are you'll never use Model "123" SKILSAW DRILL to operate a Beebe hoist—but the Sound Construction and Engineering Co. of Seattle did—and Model "123" lifted HALF TON LOADS regularly, without a quiver!

This is just another example of the EXTRA power packed inside the compact body of Model "123"—EXTRA power that's typical of all SKILSAW DRILLS from 1/4 inch to 3/4 inch capacity in steel, and up to 2 inches in hard wood.

Find out today how these rugged SKILSAW DRILLS can save time, money and manpower on all your drilling jobs. Ask your distributor for a demonstration now!



SKILSAW, INC., Chicago 30

Skilsaw Tools are sold by leading distributors of hardware, automotive and industrial supplies

**SKILSAW**  
PORTABLE ELECTRIC  
**TOOLS**

MAKE AMERICA'S HANDS  
MORE PRODUCTIVE!

ica, which collaborated on design, stated the aluminum cars would carry a load of 76.5 tons without imposing any more weight on axles and without requiring any more locomotive effort.

Alcoa also claims that non-corrosive qualities of the aluminum car body will reduce repair and replacement expenses usually experienced in transporting coal and sulphur.

## Stoker Corrosion

Manufacturers ask calcium chloride people to cooperate in study of rust that ruins feeder screws on mechanical firemen.

Ever since 1938 the coal and stoker industries have been roiled by the question of whether dust-treating coal with calcium chloride causes corrosion of stoker equipment.

● **They Had No Choice**—Before the war, coal operators were showing increased preference for dust-treating with a specially developed light oil, which, when properly applied, gives permanent results. (Coal treated with calcium chloride preparations becomes dusty again if allowed to dry out, as it may in a home owner's basement.) But when the War Production Board's limitation order L-56 prohibited use of oils and waxes for dustproofing coal, operators had no choice but to use calcium chloride.

In June, 1943, the controversy came to a head. The Stoker Manufacturers Assn., anxious not to alienate either industry, but acting in self-defense, warned stoker owners that "it has been found that the deterioration of metal parts by corrosion has been greatly accelerated and that maintenance cost has been higher on stokers which have used coals treated with hygroscopic salts (primarily calcium chloride with or without inhibitors)."

● **Shortens Life**—S.M.A. estimates that calcium chloride treated coal may reduce the life of the stoker "worm" (feed screw) to three years or even less, instead of the 15 years' service normally expected from the entire stoker unit.

Last week in Chicago, representatives of the Calcium Chloride Assn. and Stoker Manufacturers Assn. met jointly to seek better technical understanding of their common problem. On two accounts they agreed perfectly:

(1) The stoker and coal industries must have a method of dust-treating coal that will remain effective until the coal is consumed, despite relatively long storage in home basements.

(2) Excessive moisture in coal will

rust any kind of stoker feed screw, with or without calcium chloride.

● **Studies Cited**—But S.M.A. turned deaf ear to C.C.A.'s findings of recent research at the University of West Virginia, indicating that use of calcium chloride treated coal does not seriously affect the life of the feed screws or choppers. S.M.A. argued that the calcium chloride treatment necessarily involves moisture (best results are obtained when the coal bin is sealed to retain sufficient humidity, or even stored coal is wet down occasionally, hence (says S.M.A.) calcium chloride by its very nature tends to accelerate stoker corrosion.

Apparently eager to retain a sizable market which, except for wartime regulations, might have already been partially lost to the petroleum industry, the Calcium Chloride Assn. indicated it would give serious consideration to S.M.A.'s recommendations. This would involve a change from laboratory search to field investigation.

● **May Check Homes**—If C.C.A. directors approve the program, S.M.A. will provide C.C.A. with names of distributors, dealers, and home owners who complain of corrosion apparently resulting from calcium chloride preparations and C.C.A. will send field engineers to investigate. Research would probably be confined to large centers where a variety of coals is used, such as Chicago, Cleveland, Indianapolis, and Columbus.



## AIRMEN'S WINDSHIELD

Airmen are flying into battle with a new single-lens goggle which serves as a miniature windshield. Featuring a flexible frame that fits heads of all shapes, this shield covers a wide facial area to safeguard its wearer against frostbite and flash burns. Developed by Polaroid Corp., with Army cooperation, the goggle has a clear, shatterproof, plastic lens which is easily interchangeable with colored sun lenses.



## NEW PRODUCTS

### Versatile Saw

More than 100 basic materials can be cut on the DoAll Zephyr High Speed Sawing Machine, newest and most versatile contour saw developed by Continental Machines, Inc., 1301 Washington Ave., S., Minneapolis 4. Since the



full list of materials ranges from wood, plywood, paper, and rubber to asbestos board, aluminum, cast iron, and alloy steel, some of them are abrasive, others sticky, others soft, spongy, or hard. That is why the speed of the machine's saw band (shown at all times by an inbuilt tachometer) is infinitely and almost instantly variable from 1,500 ft. per min. to 10,000 ft. per min.

Whatever the material, it is listed on a "job selector" mounted on the front of the machine which shows the type of saw band, the speed, and the sawing technique to be used with it—including the comparatively new art of high-speed friction band sawing where indicated. Standard specifications of the tool include an inbuilt 10-hp. motor, a saw-to-column width of 36 in., a work table that tilts and locks in four directions, and the capacity to handle work up to 20 in. in thickness. It is said that "complete safety of operation is made possible by inclosing the saw within a steel tube except at the immediate point of work."

### Soya Butter

"Soya Butter" is a new food spread formulated by Butler Food Products, Cedar Lake, Mich., which is said to resemble dairy butter in "taste and

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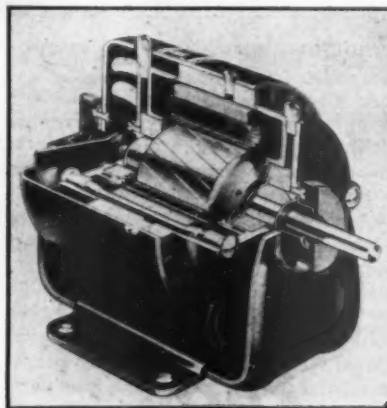
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appearance . . . but which will not turn rancid." Like butter it can be used for cooking, baking; unlike butter, it can be used for deep fat frying. The process by which it is made consists of churning hardened soybean oil in soya milk and adding certain unspecified ingredients. The product is shipped in pint-size cardboard containers or in 38-lb. fiber-board tubs.

### "Micromotor"

Newest fractional horsepower motor of the totally inclosed, shaded pole type is the Type "T" Micromotor, manufac-



tured by the A. G. Redmond Co., Owosso, Mich., for power requirements of 1/125 hp. up to 1/25 hp. Cooling is furnished by an inbuilt fan (mounted on the left end of the shaft in the illustration) which moves air through internal fins. Quiet operation of base mounted models is said to be assured by rubber mountings at each end consisting simply of round rubber pads held in place by spring steel lock rings.

Motor frames are of three piece, die-cast design in which correct alignment of every part after assembly is said to be "now a certainty by use of highly refined machining processes new to the small motor industry." The little prime movers are available in special voltages, frequencies, leads, finishes, and shaft extensions.

### Folding Projection Screen

The new Radiant "Fold-Pak" Projection Screen, developed by the Radiant Mfg. Corp., 1141 W. Superior St., Chicago 22, is described as being made of a special coated fabric that "will take all the abuse it can be given—rolling, folding, creasing, washing without cracking or peeling—in any climate in any weather. It is fungus resistant and impervious to grease, oil, and light." Because it will withstand folding and yet unfold to a "flat, unwrinkled surface"

for still or motion picture projection indoors or out, it is carried to location in a "small, light carrying bag in briefcase form." Exact size of the bag depends upon the size of the screen which comes in stock dimensions of 7x9 ft., 10 ft., 9x12 ft., 11x14 ft., and 20x20 ft.

### THINGS TO COME

A forthcoming centralized calculating machine to be operated by remote control promises new accuracies and economies to any organization that utilizes 20 or more standard calculating machines intermittently in its work. Central unit will be an electric-electronic assembly capable of handling two or three different arithmetical calculations at a time. Connected with it will be 20 or more desk instruments equipped with finger keys for all ten digits plus the traditional symbols for addition, subtraction, multiplication, division, and equality.

Say you want to divide any number up to eight digits by another number. You punch the keys on one of the desk instruments for the digits of the dividend in their natural order, punch the division key, punch out the divisor digits, and top off with the equality key. The answer, or quotient, will appear before your eyes on a paper tape together with all the figures and symbols punched. If decimal points are involved, the quotient will be properly pointed.

Since addition, subtraction, and multiplication are similarly handled, complex computations involving any or all of such arithmetical processes can be given to the instrument in a continuing series. Any time the central unit is tied up by computations, all desk instruments but the ones in use will flash warning lights when you try to put them into action. Investigation reveals that in organizations employing 20 calculating machines intermittently, only two or three of them are likely to be in use at a time—hence well within the capacity of the proposed central station.

Air conditioning for passenger automobiles in the postwar period will graduate from the luxury to the semiluxury class through the development of compact new electro-mechanical coolers that will cost no more than a good prewar home radio of the console type.



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# LABOR

## Holding Its Fire

NWLB isn't pressing for action against laggard machinists because their ban on overtime is not a clear-cut violation.

The National War Labor Board is not pressing the White House for prompt action against a San Francisco local of the International Assn. of Machinists (A.F.L.) which has clamped a flat ban on overtime work (BW-Jul.8'44,p98).

• **A Weak Case**—The only remaining step that the government could take would be to seize some or all of the 104 machine shops involved and invoke the Connally-Smith War Labor Disputes

Act. Neither NWLB nor any other Washington agency is enthusiastic about that prospect.

For one thing, government strategists think that a ban on overtime—as distinct from an outright strike—is a pretty wobbly excuse for applying the Connally-Smith penalties. For another, the Navy, which is the procurement agency primarily interested in the machine shops, is not ready to certify that the prohibition on work over 48 hours a week has cut output seriously. Until the Navy starts running a temperature, the White House can afford to let the case rock along.

• **To Speed Negotiations**—The quarrel between NWLB and A.F.L. Lodge 68 flared up early last April when the union adopted the overtime ban in an attempt to hurry up negotiations for a new contract. The regional labor board shortly

afterward ordered the old contract extended during negotiations, directed that changes be retroactive, and ordered the union to withdraw the overtime ban.

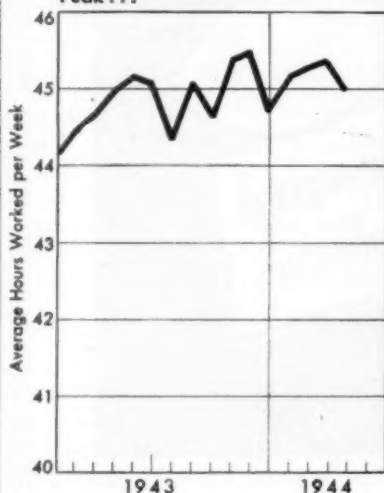
When the union balked, regional officials passed the ball to the national board. NWLB held hearings in May without getting anywhere. Then, early in June, it canceled the retroactive provision of the regional board's decision and informed the union that it would not approve any agreement reached with the employers as long as the overtime ban continued.

• **Passed to President**—This exhausted NWLB's armory, and when the union continued to hold out, the case was passed along to the White House. NWLB wants to support its regional arm, and it feels that the union's defiance threatens all its machinery of labor dispute adjustment. At the same time, it doesn't want to make the mistake, as in the Montgomery Ward case (BW-May 27'44,p15), of making a national issue out of a borderline situation.

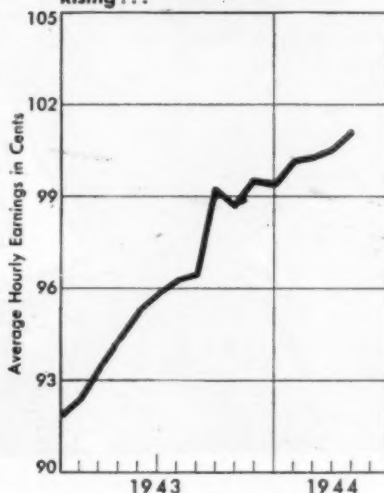
No one yet has come up with a clear

## SHIFTING FACTORS IN THE WAGE EQUATION

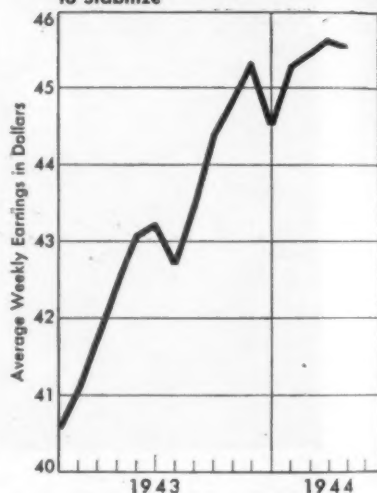
Overtime is Down from its Peak...



But Hourly Earnings Are Still Rising...



So the Pay Envelope Has Begun to Stabilize



Data: Bureau of Labor Statistics.

(for all manufacturing industries; not adjusted for seasonal)

© BUSINESS WEEK

Postwar labor costs are being set—higher—right now. Already are beginning the major shifts in wage factors that will come to dominate labor-management problems during reconversion. Labor then will demand increases in hourly rates to offset drops in overtime and so maintain the pay envelope. That's just what's happening in today's first tight job market. Hours worked may go up and down from month to month—with absent-

ceism and turnover—but the peak appears to have been hit, if not passed. So weekly earnings are no longer fattening on overtime. Hence, the continued rise in basic hourly wages takes on added significance. And actually, that rise is now in part hidden in the statistics. For average hourly earnings move not only with basic wages, but also with time-and-a-half overtime pay and with high-pay war-job rosters—first up before, now

down. In short, basic wages are maintaining an even faster upward pace than the data show. The rise continues, despite the Little Steel formula, through upgrading of workers to higher skill classifications, approved raises in wages, incentive pay plans. But all factors work to lift the average employee's standard of per-hour pay—from which management will find it hard to come down later, and from which labor will demand to step up.

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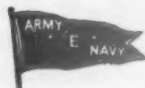
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estimate of how much the ban on overtime has cut working hours or production. The overtime situation varied from shop to shop, with some working about 54 hours weekly, others running around 48. The California Metal Trades Assn. says work hours are off about 14% since the ban.

● **Token Seizure**—Lawyers think that the government would not have to seize all of the machine shops if the dispute came to a showdown. By taking half a dozen of the largest, it would be able to bring union leaders under the Connally-Smith act.

NWLB still thinks there is a chance that the union will come around to its point of view, although Lodge 68 is known as a maverick. A somewhat similar situation arose earlier this year when machinists (both A.F.L. and C.I.O.) refused to work on new ships coming back from a shakedown cruise unless they got repair rates instead of new ship rates which were about 13% lower (BW—May 20'44, p97). NWLB ordered them back to work and they went, agreeing to have the rate question settled later.

There's also a chance that the national machinists organization will be able to swing Lodge 68 in line, but government officials don't expect much from this direction.

## Steel Showdown

**Hold-the-line campaign hangs in balance as panel winds up hearings on wage proposals, undertakes report to NWLB.**

Industry and labor have retired to their corners to await the judges' verdict in the celebrated steel wage case (BW—May 20'44, p15), with the fate of the nation's economic stabilization program hanging in the balance.

It has taken nearly five months for the case to reach the stage where the evidence is in and the special steel panel of the National War Labor Board has retired to study the testimony preliminary to making a report to the NWLB itself.

● **Flash Test of Strength**—There was a preliminary skirmish during the Christmas week end last year when the C.I.O. United Steelworkers of America pulled a strike over the question of retroactivity on its wage demands. The union won its point, but not before 150,000 steel workers had gone on strike at a cost of 170,000 tons of vital steel production. That provided a hint of what might

happen if the decision doesn't suit the man in the mill.

With this and the bitter memory of the mine workers' debacle to ponder, the unhappy judges, the members of NWLB, can see little but grief ahead. Their only consolation is that the ultimate decision probably will be made by President Roosevelt; strangely enough, it may be tossed into his lap a short time before the election.

● **Extensive Hearings**—A lot of words have been bandied about by both sides since the steel fact-finding panel began a series of hearings early in the year. More than a million words of testimony plus exhibits, were placed in the record. The stenographic transcript covers some 4,000 pages.

The union has made 14 demands of the steel industry. Chief of these are a 17¢-an-hour wage increase, a guaranteed weekly wage, severance pay, 5¢-10¢ differential for night shift workers, elimination of geographical differential, establishment of a fund for steel workers in the armed forces, with the industry and the union contributing equally, maintenance of membership and checkoff of union dues.

● **Formula at Stake**—The proposed wage increase cannot be granted without shattering the foundation of the wage stabilization program—the Little Steel formula, which limits wage increases to 15% of the Jan. 1, 1941, levels. The formula is based on the wage increase granted the steel workers in August 1942, retroactive to February of the year.

The union contends that the Bureau of Labor Statistics cost-of-living index which shows an increase of 23.4% between January, 1941, and December 1943, gives a false impression. Labor members of President Roosevelt's special cost-of-living committee charge that on the basis of their own survey prices have gone up 43.5% (BW—Feb. 5'44, p94).

● **Fighting Hard**—The steel industry, led by United States Steel, is fighting the demands hammer and tongs. It has brought to the firing line an impressive array of economists and experts and established a Steel Case Research Committee to present its arguments to the steel panel. The industry argues that if it is forced to grant the union demands it will have to pass the increased costs to the consumer by insisting on relief from price ceilings, and thus touch off a spiral of price increases which will spur inflation.

The research committee has come up with figures purporting to show that an increase of \$691,400,000 annually in employment costs would result from the granting of only seven of the 14 demands. The total includ-



### CLEVELAND GOING DRY

Employees of Cleveland's Fisher Body Plant No. 2 carry their own water to work because a drought has dried up drinking fountains and has even hit war production. The dry spell hasn't appreciably lowered the waters of Lake Erie, from whence the city supply comes, but reservoirs have fallen to danger points because of inadequate pumping facilities. Hardest hit

is the Fisher plant which has lost 5,000 man-hours of production in three departments, forcing emergency drafts on its 300,000-gal. fire reserve. With pressure in mains cut 50% to 100%, in some sections, such non-essential water uses as lawn sprinkling is illegal. City officials, meanwhile, are pressuring WPB for addition to Cleveland's 140,000,000-gal. daily pumping capacity. A similar request was turned down two years ago.



20,300,000 as the cost of the wage increase and \$283,300,000 for the guaranteed weekly wage.

**Concessions Likely**—No one familiar with the industry expects that the union will obtain all that it is demanding. But industry spokesmen expect primarily that the union will get something. Best guesses—and they are only guesses—are that the steel workers will in a wage increase of from 5¢ to 10¢ an hour.

The industry is up against a wily, tough battler in Philip Murray, president of both the C.I.O. and the steel union. Murray is looking to the future. He may give a little on his wage demands, but he's going to be a tough customer to deal with on the guaranteed wage question. That's something he has wanted to write into a contract for a good many years. It's his pet post-war plan for the steel workers.

**Hedge Against Future**—The steel union leader is familiar with the cyclical ups and downs of the industry. He knows that after the war steel production will slide downward, with the inevitable layoffs and shutdowns. He wants severance pay for those let out, and a guaranteed income for those who remain. He believes that not only the steel industry but other industry as well will benefit through maintenance of the steel workers' purchasing power.

## WHITE-COLLAR MAN

White-collar workers have been hard-pressed economically during the war. The squeeze between fixed incomes and rising living costs in which they have been caught has attracted considerable attention during the past year (BW—Jan. 29 p.99) and is likely to receive even more during the months preceding the November election.

Among those who have taken due note of this fact is Robert Routh, president and progenitor of United White Collar Majority, Inc., with headquarters at 220 Broadway, New York. Routh's ambition, proclaimed in a booklet now appearing in business offices, is to build in November an organization of 3,000,000 members at dues ranging from \$2 a year to \$50 for a lifetime membership. Its objective, he says, is to enable the middle class to "throw off the yoke of minority rule" by organized labor and capital. According to Routh, "the U.W.C.M. is intended for those who don't want a union." Despite his announced fear of "capitalist" domination, he welcomes management representatives, particularly if they are able to sign up their employees, and remarks that "industrial acquaintances" and "industrial friends" helped plan the organization.

As background for his avowed mission of "saving the middle class," first announced through advertisements in New York newspapers, Routh worked for a number of years in this country as a publicity man and government official, and in Europe from 1929 until the start of the war as head of an international health food concern, with headquarters in Germany.

## WAGE CUT BRINGS STRIKE

Something new in the line of labor disputes developed last week at the Navy's Davisville (R. I.) Advance Base Depot.

About half of the depot's 2,000 employees walked out following a National War Labor Board ruling that pay should be cut to 93¢ an hour for several hundred workers hired to do skilled labor but kept on in routine jobs when there was no longer a need for their skills. When the base was under construction two years ago, the men were taken on as carpenters at \$1.35 an hour, and painters and bulldozer operators at \$1.25.

The dispute arose when the George A. Fuller Co. and the Merritt-Chapman & Scott Corp., which constructed the base, contracted with the Navy to operate and maintain the depot and sought to substitute maintenance for construction rates.

A.F.L.'s Providence Building & Trades Council maintained that it had a contract with the companies providing for the higher pay scale and that a cut would wreak a substantial hardship on the workers.

## UNION ROW BLAMED

Disclosure last week of details of a union jurisdictional fight in Wright Aeronautical Corp.'s plant at Lockland, Ohio, helped to explain the tension which led to a strike of some 12,000 Wright workers on D-Day over transfer of seven Negroes to a department staffed by white persons (BW—Jun. 10 '44, p.98).

All but about 600 of the strikers returned to work within the week, and these holdouts were fired. Now the United Mine Workers has gone to court for an injunction restraining Wright and the C.I.O. United Auto Workers from denying the holdouts their jobs. The U.A.W. has a closed shop contract.

U.M.W., which claims to have signed up almost half the employees, charged in court that the company and the C.I.O. union had seized the occasion of the strike to get rid of workers antagonistic to the auto workers union. The C.I.O. union described the charges as "fantastic," and Wright officials offered no comment.

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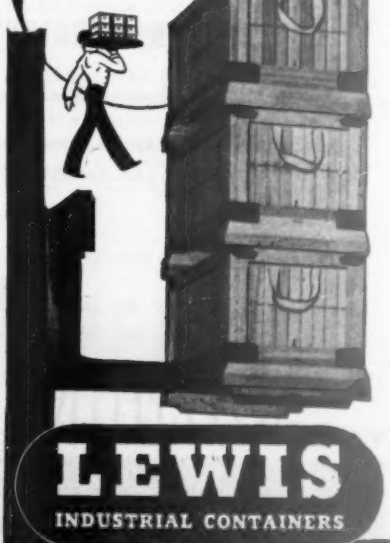
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## Institute Demurs

Industry protests NWLB order revising premium pay rule and incorporating war bonuses in basic wage structure.

The American Merchant Marine Institute, acting on behalf of Atlantic and Gulf coast steamship companies, has petitioned the National War Labor Board to reconsider its recent directive covering terms of a contract between the institute and C.I.O.'s National Maritime Union (BW-Jul.15'44,p85).

● **Exceptions Taken**—While NWLB order was hailed by the N.M.U. as the first effective step toward stabilizing conditions in the maritime industry, the industry in general greeted it with sour notes. The institute took specific exception to most of the directive's major points, including the overtime provision basing premium pay on the time of the day rather than the number of hours worked; and it expressed general apprehension about the principle of incorporating special wartime bonuses into the basic wage structure. It was this unprecedented section of the order which attracted attention beyond the shipping industry.

Simultaneously with the filing of the institute's protest with the board, N.M.U. issued a broad policy announcement which provoked comment in labor circles. One unanswered question in the C.I.O. has been: Will the Communist-dominated unions press for official C.I.O. adoption of the Harry Bridges program to pledge no postwar strikes (BW-Jun.3'44,p98)?

● **N.M.U. Says No**—The policy statement of N.M.U., which is considered part of the Bridges faction, seems to answer that question in the negative. By circumlocution, N.M.U.'s statement gets to the same point Bridges' did. The difference is that the N.M.U. policy is neither a pledge nor a demand on the rest of the union movement to follow suit. N.M.U. asserts:

"Constructive and harmonious relationships between the union and the shipowners on the all-important postwar security problems can and should eliminate completely strikes or lockouts during the postwar period."

● **Mixed Reaction**—The toning down of the Bridges idea by N.M.U. is attributed to the sharp reaction which the Bridges proposal evoked. As far as can be determined, it was met by cool skepticism on the part of businessmen and hot hostility on the part of non-Communist union officials.

Its bad effect on two fronts has ap



## Who travels the last hundred yards to victory?

**THIS "TYRANTS' WAR" is a modern war, all right, but—The Infantry is still "Queen of Battles"—still the decisive factor in combat.**

**For it is the foot soldier who travels the last hundred yards to a decision.**

Of course, the magnificent contribution of the Navy and of the Air Forces is absolutely essential to victory. No less vital is the assistance of the Armored and Tank Destroyer units and the Engineers. And the Infantry could not continue to fight but for the Technical and Supply Services which are ever on hand to provide supplies and communications, and to care for the wounded.

But the great goal of the other Arms and Services is to bring the Infantryman to a position from which he may advance to hand-to-hand combat with the enemy.

Advancing across that last hundred yards of shell-torn field is the supreme test of battle. Generally it follows a nerve-racking inching forward under enemy fire, under cover of the supporting fire of artillery, of the Air Forces, and of the heavy weapons of the regiment.

But as the Infantryman approaches the enemy lines, all this supporting fire must be lifted. He is "on his own."

There is nothing in front of the front line of the Infantry except the enemy. Then the outcome rests entirely on the effectiveness of his own individual weapons—the rifle, the bayonet, the carbine, the hand grenade. And, most important of all, on the doughboy's courage and skill.

When you read the newspapers or listen to radio news broadcasts which tell of the capture of an enemy position, salute the foot soldier—the Infantryman who bears the responsibility for the final decision—the decision of Victory.

**Back the attack!—BUY MORE THAN BEFORE!**

The Principal Infantry Weapons



# SPERRY

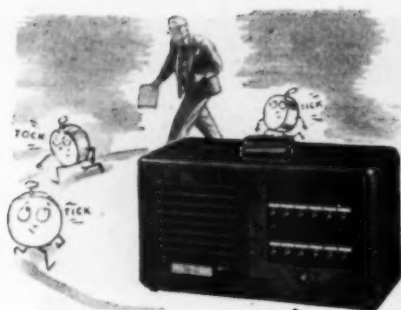
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parently convinced the majority of its proponents that it should not be pressed at this time—a decision which, if it still stands next November, promises to eliminate what would have been a major point of controversy at C.I.O.'s national convention.

## LONGSHOREMEN NEEDED

Each new American campaign in the Central Pacific accentuates the shortage of longshoremen in the San Francisco Bay area.

Last week the situation became so acute that longshore work received the No. 1 priority rating from the War Manpower Commission. The Pacific Coast Maritime Industry Board and WMC immediately laid plans to obtain 200 additional workers weekly.

Tempo of the Pacific war has been speeded up so swiftly that waterfront labor needs accumulated at once instead of gradually. Officials estimate that the Bay area waterfront had less than two-thirds the number of longshore gangs it should have had for operations that preceded the Saipan invasion.

An idea of the upward trend of cargo movement through the Bay area is shown by the fact that the waterfront has a reservoir of 260 longshore gangs now, compared with 170 gangs (comprising 17 or 18 workers each) 18 months ago. And still this isn't enough. But the War Manpower Commission insists that the needed workers must be drawn from the current "normal turnover" of labor in the area, and that workers can't be imported.

## SENIORITY PLAN VETOED

Bell Aircraft Corp.'s plan to give seniority rating to veterans, regardless of whether they were employed by the company before going into the service, is bogging down in face of practical difficulties posed by spokesmen for C.I.O.'s United Automobile Workers.

Bell officials had planned to ask the union, when contract renewal negotiations open next month, to amend its seniority rules so that recently hired veterans might be retained on the payroll when other workers were laid off. This would be accomplished by dating the new employee's seniority back to his induction into the armed services. The selective service law requires that former employees may return to their jobs with their seniority intact (BW—Jun. 17'44,p106), says nothing about other veterans. Bell has had to discharge 45 veterans recently because they were new employees and thus at the bottom of the union seniority list.

U.A.W. spokesmen have turned thumbs down on the proposed plan as



## WRINKLE EXPERT

By using his own special bench clamp John Alexander does the work of three mechanics in overhauling an oil radiator from a transport plane. Previously it took two men to hold the unit and one to man the wrenches. It's the sixth time—and labor-saving wrinkle the mechanic has devised for use in the Pennsylvania-Central Airline shops at Washington, D. C.

tending to create chaotic employment conditions during the reconversion period. For instance, they argue that if a man joined Bell in January, 1941, and went into the service in July of that year, he would be outranked in seniority under the proposed plan by the man who went into the armed forces in 1940 and upon his discharge was hired for the first time by the company. The union also argues that virtually all veterans should go back to their prewar jobs.

## COAST BUS DRIVERS RETURN

Buses were plying San Francisco streets again this week, and the National War Labor Board was getting set to go to work on a thorny case.

The Amalgamated Assn. of Street Electric Railway & Motor Coach Employees (A.F.L.), in calling off its strike after sailors replaced strikers in the drivers' seats (BW—Jul.15'44,p90), still wanted assurance that its members would not be liable, under Interstate Commerce Commission rules, for the safety of stand-up passengers.

It was this liability which caused the walkout. The Navy took over in order to keep moving its personnel between



## Man-Hunting Executive Stalks TIME

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Uniformly fine in particle size—1/10 to 6/10 micron—C-741 Alorco Hydrated Alumina gives the rubber compounder a superior reinforcing pigment. He is able to produce a similarly uniform, high-quality, finished rubber product.

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The rubber maker finds C-741 Hydrated Alumina equally helpful in expediting his production: He gets high modulus in the uncured compound and unusually good tackiness of the uncured stock. For many rubber products, higher pigment loadings are possible. Crude rubber is conserved, while retaining physical qualities required by Federal specifications.

Rubber compounders making products for the war effort should investigate the use of C-741 Alorco Hydrated Alumina as a reinforcing pigment. ALUMINUM COMPANY OF AMERICA (Sales Agent for ALUMINUM ORE COMPANY), 1935 Gulf Building, Pittsburgh 19, Pennsylvania.

**ALUMINUM ORE COMPANY**



*Aluminum and Fluorine Compounds*

Navy yards and shipbuilding establishments. The Navy had contended that it owned 350 buses which were leased to the Greyhound Bus Co. which, in turn, employed the drivers. The Navy also maintained that its action could in no way be construed as taking sides in the dispute.

The case comes before NWLB in the form of arguments over a new contract between Greyhound and the A.F.L. with the dispute centering on whether employer or employees shall be liable for injuries to over-capacity passengers.

## RAY MUST RETURN BONUS

Of all the \$4,875,465 that passed through the hands of the financial secretary of A.F.L. Boilermakers Local 72 from 1940 to 1943, the most troublesome has been the \$10,000 gratuity voted him by a sympathetic governing board on the eve of his ouster in November, 1943.

The \$10,000 bonus for service above and beyond the call of duty was the central issue in an Oregon court decision last week. The judge told Tom Ray to give it back. But Ray, no longer drawing a salary from the Portland local (BW—Feb. 12 '44, p. 98), decided it was worth fighting for and told his attorney to appeal.

Ray was the sole power in Local 72 for 13 years. His position was not challenged until wartime expansion of Portland shipyards, under a closed shop contract, handed him a membership of 40,000 on a silver platter. Enemies in the local union and in headquarters of the international union at Kansas City put the skids under him, then sued him for the \$10,000 gift (BW—Apr. 8 '44, p. 101).

## ORGANIZERS CURBED

Two parking lots owned by the Le Tourneau Co. of Georgia, but located outside the company's Toccoa plant gates, were declared out of bounds for union organizers in a recent U. S. Circuit Court of Appeals decision.

The National Labor Relations Board ordered Le Tourneau to rescind that section of a rule against distribution of union literature on company property which would include the parking lots within the restricted areas. In overruling the board, the court held it "wise and best for all concerned" that the employer not provide a "theater" for organizing efforts which "often produce excitement and feeling among employees, even exhibitions of violence."

The company was cleared of charges of unfair labor practice in suspending two employees who had violated the ruling.



## Court Straddles It

Free speech right of the employer remains where it was in light of court's dual decision in Schweitzer paper case.

How far may an employer go under constitutional free speech rights in expressing opinions on employee organization (BW—Jul. 14, 1944, p. 93)? Last week U. S. Circuit Court of Appeals, District of Columbia, straddled the question in an opinion upholding the employer's right on one count, overruling on another.

**Applied Warning**—The National Labor Relations Board has charged Peter J. Schweitzer, Inc., Elizabeth (N. J.) paper products manufacturer, with coercion and interference with collective bargaining processes in issuing a letter to employees which expressed his preference that the plant remain unorganized as in the past. In a unanimous opinion written by Judge Thurman Arnold, the court found implication in the letter that the employees might lose former benefits if they joined a union.

On this ground, the letter was held to constitute "unlawful persuasion," and a larger issue as to whether the letter was coercive was ignored.

**Not Coercive**—On a second point, the court overruled the NLRB in deciding that conversations between an employee and a management representative—in which the employee was promised financial benefits equal to those he hoped to receive as a union member—did not constitute coercion against joining the union. The court held that Schweitzer was not guilty of an unfair labor practice in treating his employees well "in order to forestall a union movement." Judge Henry W. Edgerton, in a dissent on this point, cited a U. S. Supreme Court decision that it was an unfair labor practice for the employer to induce employees to leave the union by granting wage increases.

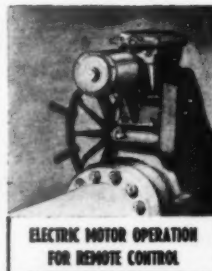
**To Ask Reconsideration**—In line with reasoning in Edgerton's dissent, the NLRB will file a petition with the circuit court asking for a reconsideration of the decision.

The board is also considering an appeal in another free speech case. The circuit court in Cincinnati recently upheld the right of the owner of the Brown-Brockmeyer Co. to express his hostility to the union, as long as his statements were based on honest belief, regardless of their factual accuracy. In this decision, no question was raised as to the factual accuracy of the employer's statements.

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# MARKETING

## Taft Ban Backfires

Army took the prohibition against vote propaganda at face value; now the author is besieged with complaints.

When the soldier vote law was before Congress, Sen. Robert A. Taft of Ohio proposed an amendment imposing a \$1,000 fine and a year's imprisonment for dissemination of publications among military personnel which might influence the soldier vote.

• **Enforced Literally**—By this week Sen. Taft probably wished he had never thought of such an amendment. For the War Dept., on the argument that it had to protect its officer personnel against the threat of such fines and imprisonment, had implemented the law with regulations that have throttled the free distribution of books, magazines, newspapers, and motion pictures in the Army. Virtually no difficulty has been encountered with the other services.

Army enforcement of the amendment amounts to censorship, according to publishers who complain that books with such remote political implications as Catherine Drinker Bowen's *Yankee from Olympus*, biography of Justice Oliver Wendell Holmes are withheld.

Similarly, such general magazines as

Harper's, Atlantic Monthly, American Mercury, the Nation, New Republic, and Saturday Review of Literature are banned.

Only a selected list of 18 publications (American Magazine, Click, Collier's, Coronet, Cosmopolitan, Esquire, Liberty, Life, Look, National Geographic, Newsweek, the New Yorker, Omnibook, Pic, Reader's Digest, Redbook, Saturday Evening Post, and Time) may be distributed to military personnel.

• **Relief Seen**—Magazine publishers, however, seemed due for some relief this week, thanks to their protests, individual and collective. George C. Lucas, executive vice-president of the National Publishers Assn., represented the group in Washington. Loudest individual protest came from Lawrence E. Spivak, publisher of the American Mercury, because the Army refused to accept 50 free subscriptions which a Mercury subscriber wanted to donate to Army hospital libraries.

The Army has promised a "new and comprehensive list of magazines of general circulation." The revision probably will add some 150 to 200 magazines to the original 18. The additions will be determined by soldier preference as expressed in Post Exchange sales, soldier surveys, Army library reports.

Thus, although the new list will not begin to include all of the 600 magazines which were sold in Post Exchanges prior to issuance of the recent regulation

—not to mention the hundreds of more obscure ones subscribed to by members of the armed services—it is expected to soothe the industry.

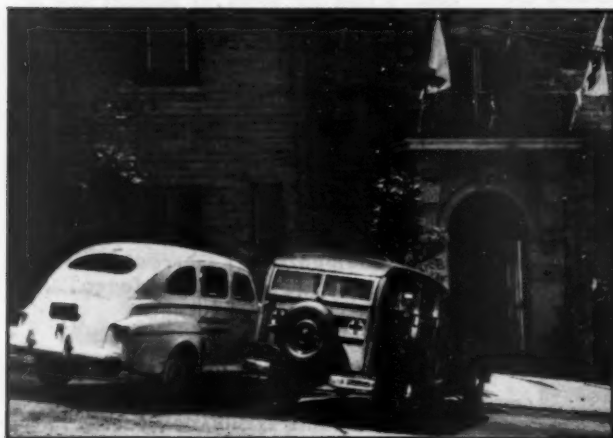
• **Taft May Intercede**—No similar relief is in sight for book publishers, who together with newspaper publishers were pinning their hopes on a meeting held with Sen. Taft Thursday in New York. Although the senator had not previously committed himself to drafting a new law or amendment, he indicated his willingness to try to induce the Army to relax its interpretation of his original amendment.

## FTC Wins Point

Commission is upheld in claim that single basing-point pricing system is a violation of Robinson-Patman Act.

The Federal Trade Commission has inched fractionally closer to its goal of outlawing basing-point pricing systems with two decisions handed down by the U. S. Circuit Court of Appeals in Chicago, in cases involving the Corn Products Refining Co. and the A. E. Staley Mfg. Co.

• **Order Is Sustained**—In the Corn Products case, the court upheld an FTC cease-and-desist order based on the contention that the company's practice of charging customers freight from Chicago (regardless of whether shipment were from its Chicago or Kansas City plant) was a discriminatory trade prac-



### BLOOD FOR LEND-LEASE

A Red Cross blood bank in San Francisco appears lonely (left) while a commercial collector (right) in another part of town has plenty of "depositors." The difference is \$4 a pint



which Cutter Laboratories pays its "donors" for blood that's resold for lend-lease export as plasma. Despite the pictorial contrast, Red Cross reports that its collections haven't fallen off since the commercial bank opened last week. Cutter's daily intake aver-

ages 75 pints which are processed Berkeley, Calif., and passed on to the Army for shipment to Allied nations. Similar commercial programs have been started in other parts of the country—none of them for Army Red Cross benefit.

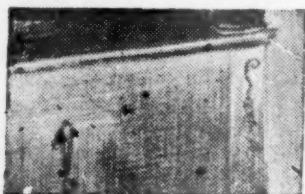
YOU have made Pullman-Standard-built streamlined trains the most popular and profitable trains in America. By your overwhelming patronage you confirmed our faith in this type of modern equipment and justified the railroads' resolution to put an ever-increasing number into postwar service.



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Expect great things. Even finer lightweight trains—and more of them—with many innovations to make your railroad journeys much more pleas-

urable. Expect more for your money—smoother riding at high speeds—comfort and convenience beyond anything you have yet experienced. For the railroads and Pullman-Standard have definite plans for your more luxurious travel—in coaches, dining cars, recreation and sleeping cars.

Even though our present efforts are dedicated entirely to the armament program, Pullman-Standard plans and research for the future provide an opportunity to returning soldiers for postwar employment. So that when materials are available these men may resume their familiar tasks of building *safe, comfortable, dependable* railroad equipment—even finer than they built before they left our shops and machines to wage freedom's war.

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SW 397, Business Week, 330 West 42nd St., New York 18, N. Y.

tice in violation of the Robinson-Patman Act, which prohibits price discrimination.

The Staley case involved a similar single basing-point system for similar kinds of products but Staley got off because the court found that the company had merely acted in "good faith" in following practices established by competitors. The "meeting competition" clause of the act was found applicable.

• **May Appeal**—Corn Products has 90 days in which to file an appeal with the U. S. Supreme Court. FTC can ask the solicitor general's permission to take the Staley case to the supreme court.

The significance of the Corn Products decision lies in the fact that this is the first time that a court has commented on the status of basing-point systems under the Robinson-Patman Act. This law is a comparatively new weapon in the basing-point fight (BW-Jul. 31 '43, p. 92), but it is one on which FTC already is relying heavily. The Staley decision indicates that it has limitations.

• **Still Pending**—The first big-time basing-point case involving Robinson-Patman, FTC's cease-and-desist case against the Cement Institute and 75 manufacturer-members (for use of a multiple basing-point system), is still held up in the Chicago Circuit Court, where it was taken on appeal by the companies over a year ago.

A new element has been introduced into the cement case, however, by one of the appellants, Marquette Cement Mfg. Co. Contending that, before the issuance of its original complaint and subsequent cease-and-desist order against the cement industry, FTC had built up a record of "prejudgment and bias" extending over more than a score of years, Marquette is seeking to have the commission barred from further handling of the case.

• **Exhibits Rejected**—The commission denied the company's appeal that it disqualify itself and refused to receive the 23 exhibits on which Marquette relies to prove its charges. Marquette then took its appeal to the Circuit Court and is now seeking the court's permission to introduce its exhibits into the evidence.

FTC has filed an answer to Marquette's appeal, contending that "it has never been held to be a denial of due process to combine in an administrative tribunal the functions of prosecutor and judge."

• **Testimony Heard**—Under FTC procedure, the chief counsel's office prosecutes complaints brought before the trial examiner's division, which after hearing all testimony, including that of the respondents, reports to the five commissioners and recommends appropriate action. If a cease-and-desist order is is-

sued, this can be appealed to a circuit court.

Marquette has now filed a response to FTC's answer charging that FTC has been "grand jury, prosecutor, judge, and lord high everything else" in the cement case and that, before assuming this multiple role had prejudged the case and advertised its prejudgment to the world at large.

• **More Delay Likely**—Whether or not this sideshow culminates in a far-reaching decision on the scope of administrative law (as it might), it will serve to prolong further the day when the cement case finally comes to trial. The U. S. Steel case (involving a single basing-point system) has been batting around for more than 20 years.

## Muskrat Renamed

Public gulped at eating "rat" so Louisiana legislature calls it marsh hare to promote acceptance of the meat.

A sweeping change has taken place in Louisiana's 6,000 square miles of water-covered land, rich commercial trapping area which gives the state its top-ranking position in the nation for fur production.

Overnight, by a stroke of the pen of Gov. James H. Davis, House Bill 675 of the Louisiana Legislature has banned the ancient name, muskrat, for the aquatic rodent which is the basis of the state's fur industry, renamed it more glamorously a "marsh hare."

• **Repugnant Association**—The change was designed to remove the principal drawback to commercial use of the tasty, very dark meat of the animal—association of its name with the common rat.

For many years the meat has been sold in some northern markets as a delicacy, and has been served in a number of restaurants as "terrapin." But these were isolated instances, utilizing only a few of the 6,000,000 animals trapped commercially in the state every year.

• **Publicity Fell Flat**—With the advent of meat scarcity and rationing, the muskrat became more popular in Louisiana, whose people know that the animal feeds only on vegetable matter. Efforts were made to acquaint other meat-hungry sections with this large source of food, but after some publicity at a Washington congressional dinner, no dent had been made in prejudices.

Last winter one quick-freeze and canning company received orders for three carloads of the meat, to be sold in northern markets as "marsh hare," but it was unable at that time to fill the orders be-

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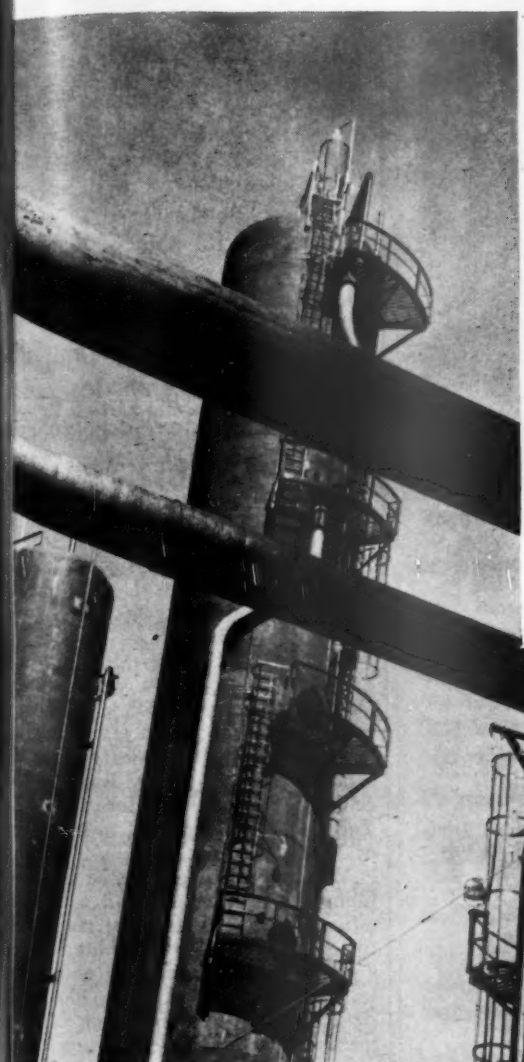
**DIAL INDICATING THERMOMETERS** and **RECORDING PRESSURE GAUGES**.

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and from abroad. Small wonder this feature of The Journal rates high in readership and observation in every survey. It is written by Mary Cullen's staff of home economists who know what

homemakers want to know because they answer as many as 1,600 telephone calls a day, as well as the queries of the thousands of visitors to Mary Cullen's Cottage, the department's street level colonial home on Portland's busiest downtown thoroughfare.

The questions cover every phase of cookery, home canning, preserving and freezing foods. Information seekers also want to know about child care, home sewing, spot and stain removal, home decoration and etiquette. Mary Cullen's service is indeed a continuous quiz show. And its experts know all the answers.

Young brides and mothers turn to this Journal service for help in running their homes, organizing their work. Experienced housewives call on Mary Cullen for new ideas, how to prepare special dishes. Yes, professional cooks, maids and even men folk find this service invaluable. For Mary Cullen's file contains over 250,000 different recipes for dishes of all kinds, from every section of the country, almost every country in the world.

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"Mary Cullen" personifies the spirit of better homemaking in thousands of homes in the Oregon Country. The women of the Mary Cullen staff, though for the most part anonymous, devote their energy and ingenuity to lightening the burden and making life more pleasant for that most important person—the homemaker. They are typical of the hundreds of anonymous men and women who daily spend their energy and ingenuity in creating Portland's favorite newspaper—The Oregon Journal.



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Members Metropolitan and Pacific Parade Groups



cause facilities had not been organized to collect, ice, and pack the meat in such quantities.

• **Provided Impetus**—But the orders were taken as justification of all efforts to popularize the meat; they gave impetus to the move to change the name finally and completely, and led to preparations this year to meet orders in large commercial car lots.

Use of the meat will augment income already high for the trapping industry. In the past four years, the harvest of pelts has brought revenue estimated in excess of \$19,500,000 for some 20,000,000 or more pelts—highly valued, demers soft fur frequently dyed and sold as a variety of "seal."

• **Sweet Byproduct**—The muskrat-marsh hare—has a distinct musky odor before preparation for food, and the glandular musk is sold as a prime perfume base.

## No Home Smells

Household deodorants, unfamiliar until recently to household users, develop volume sales. Distribution widens.

To get ahead socially, even a house must be free of offending smells—or a half dozen producers of packaged household deodorants have convinced several million housewives in only a few months' time.

• **New Market Idea**—Most of the brands that now have whopping big sales as domestic deodorants had been sold to institutions and restaurants for several years, but the idea that home should also be de-smelled was first conceived by Seeman Bros., Inc., huge New York grocery wholesalers, in the spring of 1943.

When Seeman began to have trouble filling orders from its retail outlets for rationed goods. A deal was made with the Airkem Corp. to distribute Airkem, a greenish liquid consisting of noncritical chemicals and activated chlorophyll (based on the plentiful green coloring matter of vegetation everywhere). Seeman changed the name to Air-Wick had the solution bottled in small quantities suitable for domestic use, and launched an advertising campaign to convince housewives that cooking odor, stuffy rooms, and musty closets could be sweetened easily by Air-Wick's "fresh piney smell."

• **Volume at \$4,000,000**—Air-Wick sales are now reported to have reached a \$4,000,000 a year rate, although it is not yet being sold nationally. In addition to the original outlet through gro-



every store, Air-Wick is now distributed through drug, cigar, department, hardware, and variety stores.

• **Quickly Imitated**—When Air-Wick caught on so quickly, other manufacturers brought out similar room perfumers or started pushing household sales for the deodorants they had on hand.

Using different formulas, but relying on the Air-Wick type of bottle with a wick for releasing volatile aromatics, the Vapor Chemical Corp. launched Vair, and last October Air Treatment Corp. brought out Breeze. Vair based its advertising on a coined word "stinch"—a combination of stink and stench.

• **The Sales Appeal**—A typical ad shows a feminine guest grimacing and whispering: "She has a lovely home—but it smells of household stinch," and then the ad suggests that you may not be conscious of odors in your home but others are.

Air-Wick, Vair, and Breeze were all invented by former air-conditioning men, but O.D. 30, another deodorant of a different type that has had a big sale, was discovered by Dr. Walter H. Eddy, Good Housekeeping Institute nutritionist. O.D. 30 is a finely ground powder containing potassium permanganate as an oxidizer which, when mixed with hot water, releases fumes designed to kill, rather than counteract, unpleasant odors. Manufactured for several years by the O.D. Chemical Co., O.D. 30 was taken over for distribution as a domestic deodorant last March by R. C. Williams & Co., Inc., large New York wholesale grocery house. It is now being marketed in five eastern states as an all-purpose deodorizer which can be used as a spray, rinse, or vaporizer.

• **Spreading From East**—So far, the eastern market has been the focal point for sales of household deodorizers, although all brands have plans for nationwide expansion this fall.

In the Middle West, American Products Co. of Cincinnati has been selling Air-Aid primarily as an absorbent for refrigerator odors. It is a small package of activated carbon which filters out odors passing through it by absorption. F. Uddo & Sons of New Orleans has been marketing a disinfectant and air deodorizer called Sure-Klean in the South and West, and the O'Cedar Corp. of Chicago is distributing a volatile oil combined with formaldehyde called Odac.

## GUM WON'T STRETCH

Civilian gum chewers can take little comfort from latest developments in the industry. Apparently, gum supplies on retail counters will be increasingly sparse until the East Indies and Malaysia are

## RESERVE YOUR COPY NOW!



## NEW ELECTRONIC FACT-BOOK FOR BUSINESS MEN —BRIEF, PRACTICAL, SOON TO BE PUBLISHED!

No matter what your business may be—if electronics has even a remote connection with the future of your product or process, you'll want to get one of the first copies of this helpful, *thought-provoking* new book. It brings electronic "star-gazing" down to earth... rolls up your sleeves for *practical action* on realistic post-war plans.

Fact-packed with stimulating, simplified help on these subjects: 1. How you can apply electronics to your product... 2. How others have used electronics... 3. What's ahead for humanity electronically... 4. When you are ready for action... 5. Eleven ways Operadio can help you... 6. Operadio "Firsts" for business and industry.

"Can Electronics Improve Your Product?" will be available as soon as wartime conditions permit publication. Your reservation *now* will assure you one of the first copies off the press. Send the coupon today!

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Please send me your free book "Can Electronics Improve Your Product?"  
Put me on the list today!

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# Here's a BANTAM that's won the HEAVYWEIGHT Crown!



Yes, it's far fancy to imagine a bantam winning the heavyweight title. But that's exactly what has happened in the field of hydraulic rams!

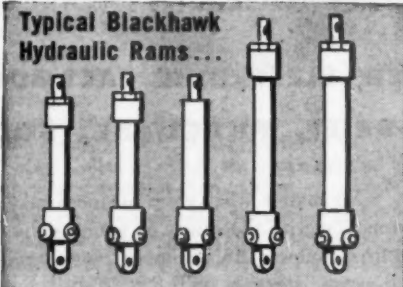
The winner — with power and stamina to spare — is the *Blackhawk* type of hydraulic ram.

Ordinary hydraulic rams are assumed to have *high* pressures when operating with internal fluid pressures from 300 to 3000 lbs. per square inch. However, *Blackhawk* Hydraulics go up to 10,000 lbs. per square inch — and are *truly* HIGH PRESSURE!

Consequently, *Blackhawk* rams need less size to do the job. Resulting compactness means a hydraulic system with less weight — greater efficiency — less friction — easier installation in tight places — less design change in your present equipment.

*Blackhawk* rams are available in a wide variety of lengths and sizes — with bases and plungers fashioned for varying needs. Whether it's 500 lbs. or 50 tons of power that's wanted — there's a *Blackhawk* ram to deliver it.

Typical *Blackhawk* Hydraulic Rams...



## And Here are Some of the *Blackhawk* Pumps



**P-60**—Hand operated. Designed especially for stationary mounting in cab or near operator of such equipment as road machinery. Oil line connects to ram.



**P-76**—Hand operated. Designed for portability. Especially adaptable to hydraulic rams performing as service tools rather than in fixed installations.

**P-104**—NEW! Power-driven. Operates from fan belt or crank shaft of gasoline or diesel-powered vehicles — also from electric motors. Serves one or more rams.



**EQUIPMENT MANUFACTURERS:** If your product requires the application of controlled force to an operating part — and if you would like to give your equipment added sales appeal and extra speed and ease of operation — then you will want to know more about *Blackhawk* HIGH-PRESSURE Hydraulic Controls. Write *Blackhawk* Manufacturing Company, 5300 West Rogers Street, Milwaukee 1, Wisconsin.



# BLACKHAWK

*High-Pressure Hydraulics*

regained from Japanese occupation. American Chicle and Beechnut recently have had to cut civilian shipments further to meet their military quotas. Wrigley is starting general distribution of its war-model Orbit gum (BW—Jun. 24 '44, p. 83) under a rationing plan that indicates that this item will be none too plentiful.

Last week each of Wrigley's 900,000 dealers got a letter signed "Phil. K. Wrigley." It enclosed a certificate for the retailer to pass along to his wholesaler for forwarding to the manufacturer. Eventually, the retailer will pay his wholesaler and receive one box of Orbit.

How and in what quantity the dealer will get additional stocks is not disclosed. But Wrigley makes it plain that there will be much less Orbit than there was of Spearmint, Doublemint, Juicy Fruit, and P.K.'s earlier this year.

## Milk Experiment

Proposed pricing formula for New York area is based on butterfat plus skim milk. Co-op payments are the hot question.

Dairymen throughout the United States know that the New York milk marketing area is most frequently the experimental ground for practices later incorporated in the rules governing the more than 20 other federal marketing areas throughout the country.

• **Revision Planned**—Hence they will watch closely next month's War Food Administration hearings on proposed amendments to the federal order regulating the handling of milk in that area. WFA's proposals—taking the form of a whole new order—deal with such important questions as a new pricing formula based on butterfat content plus skim milk, rather than a whole milk price.

Increased importance of skim milk as a food and for commercial uses deserves recognition in the price structure, according to WFA. New York market suppliers have been paid for skim milk for the past two years on a temporary basis, and the policy has to a large extent stopped the dumping of skim milk—a practice common among farmers during the spring flush.

• **To Discuss Distribution**—Other revisions involve ways and means of handling market shortages and surplus supplies, and spelling out the official auditing system.

The hottest question right now in New York milk marketing—that of payments to cooperatives, subsidies in effect—will be conspicuously absent from

# Do you know...?

Quiz on wartime short-cuts useful for peacetime production—No. 3



**Q.** Airplane bomber and glider noses are made of:

- ☐ Plexiglas    ☐ Lucite    ☐ Lumarith

**A.** All three are used. In cementing reinforcing ribs in plastic domes, great care must be taken to keep cement off plastic section around the rib. Permacel paper masking tape serves to protect the dome perfectly—holds tight till the cement dries, then strips off clean, taking surplus cement with it.



**Q.** What's being dropped from these planes?

- ☐ Signal flares    ☐ Parachute bombs    ☐ General supplies

**A.** Parachute bombs. However, signal flares and general supplies are also dropped from planes. Containers for all three—as well as for shells, high explosives, and many other military items—are held together and sealed against dirt and damage with tough, quick-stripping Permacel cloth tape (Jonflex).



**Q.** Ships entering mine fields elude magnetic mines by:

- ☐ Careful navigation    ☐ Speeding up    ☐ Depolarizing the ship

**A.** Current passed through a special cable depolarizes the ship. A special Permacel cloth tape plays an important part in this operation. Created to meet a special need, this tape is an example of how The Industrial Tape Corporation meets the challenge of unusual and exacting specifications.



**Q.** When a tank goes into battle its gun muzzles are covered with:

- ☐ Gun boots    ☐ Tape    ☐ Nothing

**A.** Permacel moisture-proof cloth tape (Utilitape) is used to seal gun barrels against dirt and moisture. Also used to protect tanks and planes against corrosion during overseas shipment, this tough, moisture-proof tape will tomorrow protect overseas shipments of automobiles, farm implements and other peacetime products.



**Q.** This post-war package may be sealed with same tape now used to:

- ☐ Protect wing ribs    ☐ Seal shell canisters    ☐ Insulate wires

**A.** Permacel's companion cellophane tape, Texcel—now used for protecting wing ribs and for many other war jobs—will find many applications in post-war packaging. Shirt envelopes, candy boxes, suspender and garter containers are but a few of many items this quick-sticking, durable cellophane tape will seal better.

**Q.** Which of these types of pressure-sensitive tapes can help speed and improve *your* production?

- ☐ Paper    ☐ Cloth    ☐ Cellophane    ☐ Metal    ☐ Glass

**A.** All of these types of Permacel tapes are today used in war production. Many war uses will prove helpful in your business when you return to post-war work. Meantime, our research laboratory facilities are available to you for development of special tapes to fit war or post-war needs.

**Permacel**  
**INDUSTRIAL TAPES**  
INDUSTRIAL TAPE CORPORATION

New Brunswick, N. J. Makers of **Texcel Tape**



# clues:

• OFFERED for sale are patents, patterns, drawings, inventory, good will, manufacturing rights to a highly costly tool maintenance gadget, no competition due to exclusive design. Five patents issued, four pending. No selling organization. Owner wishes to retire. Profit margin high. Machine does in one operation what usually requires 2 machines, 4 or 5 operations. Here is opportunity to buy outright and profitably market needed post-war item in large demand. This is a successful going concern now. Box 396.

• **EXPORT COMPANY** requires representatives in New York, Chicago, Denver, Minneapolis, San Francisco, Los Angeles, Southern States and Canada. Argentine products of all categories. Communicate by airmail. Mutual references. Export manager expects visit U. S. shortly. Ernest Amtmann, Peru 375. Buenos Aires-Argentina.

• **EXECUTIVE MANUFACTURING** engineer. Cornell, M. E. 12 years diversified Industrial and Manufacturing Engineering experience. Seeking West Coast connection as partner, executive or consultant. Box 398.

\* **NATIONAL PUBLICITY** through selected trade and consumer magazines and key newspapers promotes acceptance of new products. Releases prepared by top-flight publicists. National Industrial News Syndicate, 8 West 40th Street, New York, N. Y.

"clues" ads are published as space is available, usually within two or three weeks of receipt. Closing date on publication issues, Thursday of preceding week. Rate: 50 cents a word; \$3.50 per line. Minimum \$5. Box number counts as 2 words. Address replies c/o Business Week, 250 W. 42nd Street, New York 18, N. Y.



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discussions at the hearings. Reason: authorities agreed that extensive testimony on debate of this problem two years ago covered the question.

• **Two Obligations**—Co-op payments are a hot topic right now because D. C. J. Blanford, administrator of the New York metropolitan milk marketing area, has threatened to drop co-op payments if the producer organizations do not fulfill the two obligations imposed on them by the federal marketing order:

(1) Milk must be sold at the highest possible price in order to enlarge producer returns. Price does not exert a normal influence on sales in a pool area, because under the pool system the farmer is always paid the average price received on milk sold for more than 20 different purposes—\$3.15 on the current market.

(2) Fluid milk must be supplied to the city in the short production season.

● **New York Shortage**—Traditionally this short season is July through December. And the New York market already is seriously short of fluid milk, which brings a price of \$3.70 a cwt. The shortage is attributable in part to the fact that cooperatives are selling to manufacturers and their violation is compounded by the price differential since milk used in making cheese brings only \$2.295 a cwt.

**Co-op men argue that transportation is short for hauling milk to the city, but**

A new national advertiser bought space this week in approximately 100 newspapers—and it was a considerable chunk of space too, the size of a tabloid newspaper page. Next week there will be a second insertion in the same papers. The advertiser is the C.I.O. which, having finished its appeal to the National War Labor Board for increased wages (page 90), took its case directly to the public and at the same time to the Democratic Party policymakers in session at Chicago. Abandoning the cut-and-dried factual statements that labor in the past has used in occasional newspaper advertising, the C.I.O. ad (prepared by Wiltman & Pratt, Inc., Pittsburgh agency), employs professional display techniques. A distressed housewife explains that "John's wages are frozen and yet the bills keep piling up." The ad states flatly that living costs have soared 45% (ignoring the government statisticians' figure of 25%). C.I.O.

the administrator counters that transportation can be found to the processing plant it can be found to the city.

• **Contract Troubles**—A more fundamental reason for diversion of fluid milk at this season is that manufacturers are likely to contract on a six-month basis for summer milk. Hence in order to find a customer for his surplus in the April-May-June flush, the supplier signs a contract to supply the manufacturer throughout the summer months.

Thus in fulfilling his contract, the supplier deprives the city of an adequate fluid milk supply; and deprives the collective dairy farmer of \$1.40 a cwt. in return on his milk. Dark suspicions in other quarters have it that the brokers who operate for the co-ops as well as for other suppliers are withholding supplies either (1) to break OPA ceilings on handling charges (now 25¢ to 40¢ a cwt.), or (2) to sell in the black market.

● **Opportunity for Profit**—Without ceilings brokers would be enjoying a golden era for profiteering because markets as far away as Washington, Baltimore, Georgia, and New England are short of milk and coming to the New York milk shed to supplement supplies. They can and do pay fantastic prices because the supplementary supply is such a small fraction of the total. Such markets would always provide brokers an outlet for suppressed supplies in the short season.



spokesmen say that almost all of the papers which were offered the ad accepted, some after a bit of hemming and hawing about the current advertising space limitations. Next week's ad will deal with C.I.O. president Philip Murray's annual wage plan.

# THE WAR AND BUSINESS ABROAD

BUSINESS WEEK  
JULY 22, 1944



**Don't miss the domestic political significance of recent announcements about a string of pending international conferences, most of which are likely to be held in this country.**

Starting with Bretton Woods, and working up to a spectacular Roosevelt-Churchill-Stalin previctory meeting (here or abroad), they will be carefully dramatized into the President's campaign for reelection.

The tempo of the series of conferences is already being stepped up.

Stage setting for a fall meeting of the Big Three will begin next month when routine delegations (including one from China) will open preliminary discussions in Washington on an international postwar security organization.

**You can expect Secretary Hull to reveal at this meeting the peace plan for Germany which Eden and Molotov refused to discuss with him at last year's Moscow meeting.**

**But look for no quick deal on a full-scale peace setup.** Washington, London, and Moscow are still far from agreed on how postwar Germany is to be handled.

At a time when certain high-placed Republicans are demanding a thorough-going examination of the British master agreement on lend-lease, **the Administration has cleverly forced a showdown with London on the international oil question—always good as a headline-getter.**

Though some observers still believe the latter will deliberately stall the forthcoming oil negotiations between Secretary Hull and Lord Beaverbrook, **don't be surprised if Ickes and other Petroleum Reserve Corp. officials stage a move shrewdly planned to jolt the British out of their complacency.**

Conversations held here last spring among American and U. K. technical experts brought some agreement, but the Churchill cabinet has been apathetic about making major governmental commitments on postwar cooperation in an oil world in which they are so advantageously situated.

Other individual commodity conferences are likely to be called in the near future, but **ignore all rumors that more than an exploratory international rubber meeting is in the cards before 1946.**

Washington has flatly told the British and Dutch that the U. S. will not negotiate a new world rubber agreement until the major producing areas in the Far East are liberated and the condition of the plantations appraised.

Incidentally, this gives the U. S. 18 valuable months in which to prove how cheaply synthetic rubber can be made, since most plants are now in mass production.

**If synthetic costs can be cut to 9¢ a lb., it is doubtful that more than about half of the Far Eastern plantations can compete profitably.**

Look for the Russian drive on East Prussia to hold the limelight until Anglo-U. S. forces are prepared to launch their next major push.

And, incidentally, don't miss the significance of Russia's neatly planned advance.

Moscow, while heading steadily toward Berlin, is seeing to it that Russian troops first occupy all of the territory which ultimately is to be annexed to the Soviet Union. This will include the three Baltic states, strategic pieces of Finland, eastern Poland, and Bessarabia.

**Russia is losing no time in getting specific postwar economic plans under**

# THE WAR AND BUSINESS ABROAD (Continued)

**BUSINESS WEEK**  
**JULY 22, 1944**

way (BW—Apr. 15'44, p111). Soviet agents in this country are already dickering for:

(1) **U. S. technical experts** who will go to Russia on medium-term contracts to help plan rehabilitation and expansion of specific industries.

(2) **U. S. firms** which are prepared to accept huge Soviet orders for industrial machinery and to train—in their factories—large numbers of Russian workers who will install and operate the equipment when they return to the Soviet Union.

Best recent measure of the Soviets' immediate industrial aspirations is the Moscow-approved report that **Russia plans to expand prewar steel capacity** of about 22,000,000 tons (reduced temporarily by the war to about half that amount) **to a total of 60,000,000** (compared with U. S. capacity of about 93,000,000 and a British total above 15,000,000).

Behind-the-scenes discussions of postwar credits for the Russians are progressing.

Eric Johnston, U. S. Chamber of Commerce president, in declaring that Russia must have long-term credits if huge orders are to be placed in the U. S. market, defined short-term credits as running less than five years, medium-term from five to ten years, and long-term from ten to thirty years.

U. S. manufacturers selling in Latin-American markets are caught on the horns of a dilemma.

**Due to curtailed deliveries of their products south of the Rio Grande, prices have been boosted by local dealers to fantastic levels, though the goods were sold by the U. S. manufacturer at OPA ceiling prices.**

If this fact were advertised in Latin America, it would help put an end to enemy-inspired propaganda that the U. S. is profiteering from the war and speeding the inflation that has already set off a wave of Latin-American revolutions (page 113).

But, at the same time, it would stir the enmity of harried native dealers who are trying to avoid bankruptcy during the war by earning overhead (and usually a nice profit) on a necessarily reduced volume of sales.

Washington has already been forced to deal with the critical inflation situation in Mexico (BW—Jul. 15'44, p32).

**In a vigorous new move to get badly needed supplies to Mexico City, the New York & Cuba Mail Steamship Co. has been allowed to schedule two sailings to Vera Cruz and Tampico in the next two months.**

If the congestion on Mexican railways continues to be acute, this limited service may be continued indefinitely.

**You can look for this kind of cooperation to be extended to other revolution-threatened countries unless there is an unfavorable turn of events in Europe.**

Colonial France has devised a scheme for the unscrambling of Axis-forced sales of Jewish property which may set a precedent for all of occupied Europe as well as North Africa.

**The Tunisian Court of Appeals has ruled that sales caused by anti-Jewish laws in Tunisia are null and void, and has empowered magistrates to restore both parties involved in such sales to the status quo before the sale.**



## Co-ops Steam Up

Through a new law, Brazil encourages consumer and producer ventures. Some expect co-ops to dominate postwar trade.

SAO PAULO—War is speeding the growth of co-ops in Brazil.

Expansion has been more conspicuous among producers hit by the loss or shrinkage of markets for their products. In order to mitigate the effects of rising living costs on low-paid workers, the government is actively encouraging formation of consumer cooperatives.

**Trade Dominance?**—At present there are 1,730 co-ops with a membership of

270,000 (there are more than 4,000 co-ops in the U. S., and several million members). Under the stimulus of government propaganda and aid, the growth of co-ops in Brazil is so rapid that many people predict the system will dominate trade after the war.

Brazilian experience has shown mixed producer and consumer co-ops more successful than building co-ops and straight consumer co-ops, particularly in heavily populated Sao Paulo state. New government measures are designed to remove some of the obstacles to consumer co-op success.

Small co-ops selling potatoes and green vegetables to Sao Paulo city, and more recently to Rio de Janeiro, have been particularly profitable.

**Fishermen Aided**—Marked progress has also been made in fishing co-ops.

More than 50 of these have been set up by the Rural Economy Service of the Ministry of Agriculture. These co-ops pay an 80% advance on catches, help purchase engine-driven trawlers, nets and other gear, and sell fish at remunerative prices.

Formation of co-ops of farmers whose produce markets have been disrupted by the war has made swift progress. Growers of matte, mandioca, and cocoa have formed co-ops, and the official organizations controlling trade in these products have been ordered to give preference to co-ops over private sellers in the allocation of export quotas.

**Meat and Wool**—Steps are also being taken to organize co-ops of stockbreeders, which may eventually lead to their replacing the big meat-packing concerns now dominating the business. The Min-

## Latin America Changes Horses

Ten years of the Good Neighbor policy have dimmed recollection of the hemisphere-wide revolutions of the early thirties, led many a U. S. citizen to regard the 20 Latin-American republics as political democracies of the U. S. type.

The recent political upsets from Argentina to Guatemala, revealing the immaturity of hemisphere "democracy," have shocked some U. S. observers.

**Policy Failed**—That these revolts did not come sooner may be attributed to Washington's policy of stability at all costs. Their occurrence signals the failure of this policy and focuses attention upon the direct relation between economic stability and political stability in weakly governed states.

The political monsoon south of the border has blown both hot and cold. Although each "revolution" may have found origin in basic economic maladjustments arising from the war, motivation ranged from antidemocratic reaction in Argentina, through pseudodemocratic antifascist reaction in Bolivia, to pro-Allied, semidemocratic reaction in El Salvador and Guatemala.

**Protective Wing**—Cut off by war from markets for vital exports and from essential import sources, Latin America crept under the proffered wing of the United States and Britain. Neither has been able to satisfy expanded needs for foods, consumer goods, and manufacturing equipment.

U. S. experts supplied plans, but stymied by official reluctance to ram-



ify already complex authoritarian controls, these plans were ignored. Prices continued to soar as shelves emptied, with inevitably worse effects on the welfare of workers and farmers.

**Axis Elements Aided**—Scene shifting in Argentina last year reinforced pro-Axis elements, which may yet weather Allied economic intimidations. The nation is self-sufficient for the short run, and its chief products are vitally needed by the Allies, particularly Britain.

Bolivia bounced the tin-dominated government of Enrique Penaranda last December. In April, Provisional President Gualberto Villaroel crushed a revolt of army officers, put Mauricio Hochschild, tin king, in jail. Only after studious investigation—and pressure from other Good Neighbors—did the U. S. recognize the new Bolivian government.

**Democracy Promised**—Ecuador's new president, Velasco Ibarra, who accepted the post at the request of a military junta which unseated Arroyo de Rio in May, has promised a constitutional assembly and "democratization within two months."

Colombia's near-revolution a fortnight ago involved the kidnaping, by army officers, of President Alfonso Lopez—a liberal prolabor intellectual. Loyal troops rescued the president, but sporadic expressions of unrest continue.

Guatemala's dictator Jorge Ubico fell after a popular twelve-day strike in June.

**War Minister In**—El Salvador's armed revolt in April was put down by swift action of troops loyal to President Hernandez Martinez, but a short general strike in May retired Martinez, put Minister of War Ignacio Menendez in power until a scheduled general election.

istry of Agriculture is planning a central wool co-op to handle the Rio Grande do Sul wool clip, to set up a company to process and spin the wool, and thus increase Brazilian self-sufficiency in yarn.

Because of the confidence which it engenders among producers, proper co-op organization is regarded as a means of adjusting farm production to requirements, and the Ministry of Agriculture is therefore engaging in a large-scale propaganda campaign to encourage formation of co-ops. The existence of official control organizations in coffee, pinewood, sugar, rubber, and lard production, makes it easier to create co-ops.

• **To Evade Profiteers**—A decree passed this month made Brazil's newly created equipment certificates, available to industry for postwar buying in lieu of excess profits tax payments (BW—Mar. 4'44,p118), also available to farmers wishing to buy agricultural machinery through their co-ops.

The greater opportunities for profiteering which the war has created is stimulating co-op growth, and the government is studying the idea of a co-op to sell foodstuffs and other goods to several hundred thousand government employees in Rio de Janeiro who, in general, receive relatively lower wages than the average of workers.

In order to encourage co-ops, a new cooperative law provides for the compulsory liquidation of company stores and the substitution of consumer co-ops.

• **Tax-Exempt**—One obstacle to co-op growth in the past has been removed. The co-op law grants full exemption from all stamp, income, and property taxes, reduction in transport charges and legal fees, and short-term exemption from federal taxes. To obviate failures, the government bank has lent financial aid, but now a cooperative credit fund of \$15,000,000 is being set up to replace the bank's function. Revenue from co-op taxes, surplus co-op cash, and private deposits will be added to the initial capital of the fund.

Co-ops will be officially under the wing of the Ministry of Agriculture's Rural Economy Service, and this agency will authorize co-op formation and oversee revisions of statutes applying to co-ops. Co-ops are forbidden to speculate in bonds, buy properties for lease to third parties, participate in political or religious affairs, issue preference shares, turn themselves into private concerns, or become incorporated with such firms.

Brazil's Minister of Labor plans to weld the co-op movement with the trade union organization, by giving special privileges to co-ops run by unions, thereby extending social benefits to affiliated workers.

## Mexico Is Planning

New agency will promote and supervise new industries.

Mission comes to U.S. to buy machinery, farm equipment.

MEXICO, D. F.—President Avila Camacho has just announced creation of a federal Commission for Industrial and Agricultural Development, destined to foster and supervise new industries in Mexico.

The new coordinating agency is an offshoot of the Industrial Sub-Commission of the year-old U. S.-Mexican Commission for Economic Cooperation. It embodies in its prospectus the principles agreed upon, two months ago in New York (BW—May20'44,p113), by the Commissions of Inter-American Development.

• **Shopping Expedition**—Last week a well-heeled purchasing mission, repre-

sented the new Mexican development commission, arrived in Washington to shop for U. S. equipment. Industrialists and government officials composing the mission are seeking available war machinery and farm equipment for immediate delivery plus heavier equipment for delivery after the war.

For initial purchases and orders \$20,000,000 has been made available by the Bank of Mexico (bank of issue) and the Nacional Financiera (semiofficial industrial investment bank).

• **Help with Financing**—In Mexico the new agency will act not only as a planning and coordinating body but also as a center for the financing and technical organization of all kinds of industrial enterprises considered necessary to the nation. Its main task will be to step in wherever private industry and capital fail to participate.

• **To Prepare Master Plan**—The government bill which describes the aims and purposes of the agency provides in article 3) that the commission shall:

(1) Prepare a general, comprehensive master plan for the rational development of the country's natural resources and reserves.

(2) Plan, finance, and set up industries necessary for the normal economic life of the country and which have not been developed by private initiative either on account of difficulties in financing, lack of technicians, or for other reasons.

(3) Cooperate, wherever necessary with private capital in the financing and creation of industries which are integral parts of the development plan.

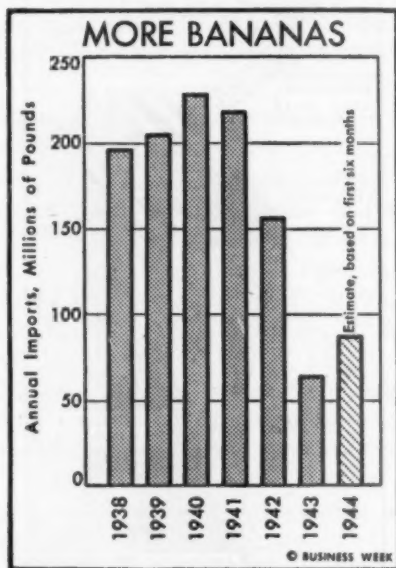
• **Not Permanent**—Article 4 of the bill, however, stipulates that the commission will be a substitution for private enterprises only temporarily, "in order to stimulate the setting up of industries deemed indispensable to rational development." It will not assist or initiate any enterprise which might create unfair, uneconomic, or unnecessary competition with private business.

Article 5 provides further that private capital will at any time be permitted to buy the enterprises created by the commission, on terms to be established later.

• **Other Privileges**—Article 10 grants the commission priority rights for the exploitation of national resources.

Article 12 provides that the government will grant the commission, for an enterprise it may set up, aid, patronize, under its plans, tax-free imports of necessary machinery, as well as federal tax exemptions granted other new essential industries.

The commission is to be composed of three members: a chairman (to be appointed by the president), the general manager of the Nacional Financiera,



Normal supplies of bananas cannot be expected in domestic markets until after the war, but imports are increasing considerably this year. So far this is due mainly to increased deliveries to Gulf ports by small boats which have been lured into the trade by high freight rates and plentiful cargoes since the submarine menace in the Caribbean ended. Key banana importers are now hoping for the gradual return of their specialty fleets, which were largely commandeered by the War Shipping Administration at the outbreak of hostilities.



## The Minuteman is Still the Man of the Hour

The Minuteman was a most resourceful civilian who worked hard for his family and home and was quick to fight when their security was threatened.

He did the very things we are asked to do today. He made things last. He wore things out and did without. He was one of the first to stretch food and fuel.

Farmers, fishermen, sailmakers, smiths or cobblers—all were Minutemen—all were dreamers who loved their America—all were doers who fought

and saved and sacrificed. They showed us the way to win.

Americans, since the days of the Minuteman, have welcomed their opportunity to earn security for themselves and their families in a better world.

Today, when wartime trials provoke us, America is recapturing the spirit of '76—America's fighting spirit, so perfectly symbolized by the Minuteman—the spirit that will hasten Victory by hours, by days, perhaps even months.

*Americans have always been neighborly. It is quite natural then for Budweiser to be America's favorite beer—for, when good friends get together, Budweiser is a friend that needs no introduction.*



In addition to supplying the armed forces with glider and bomber fuselage frames, wing parts, gun turret parts and foodstuffs, Anheuser-Busch produces materials which go into the manufacture of: Rubber Aluminum • Munitions • Medicines • B Complex Vitamins • Hospital Diets • Baby Foods • Bread and other Bakery products • Vitamin-fortified cattle feeds • Batteries • Paper • Soap and textiles—to name a few.

# Budweiser

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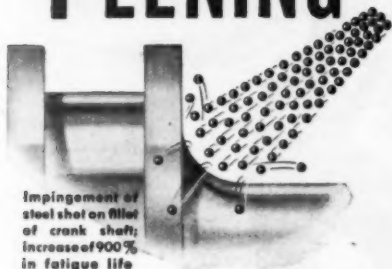
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ciera, and a representative of the Ministry of National Economy.

● **Inherits Assets**—The commission will be able to use government technicians. Its funds will include: (1) the assets of the Fund for Industrial Development—created in 1941 and abolished by this bill; (2) 50% of the government's share in the profits of various official and semiofficial credit institutions, such as the Nacional Financiera; and (3) future appropriations by the government.

The master plan on which the commission's operations will be based is not yet completed, but initial projects inherited from previous national development plans and O.K.'d by the U. S.-Mexican Commission for Economic Cooperation, such as the cement plant program (BW—Jul. 15 '44, p113), will be continued or begun.

## ODT RETURNS A RAILROAD

The American Railroad Co. of Puerto Rico has been returned to its owners after more than a year of operation by the Office of Defense Transportation (BW—Jun. 26 '43, p92).

The railroad was seized by ODT in May, 1943, at the direction of President Roosevelt after labor difficulties threatened to halt distribution of foods and other essentials to the civilian population and to ports for export. The 277-mi. railroad serves 90% of the island's coastline.

Railroad workers asked for a 25% wage increase last year; seizure of the line followed the company's refusal to accept a 12½% compromise proposed by the Insular Commissioner of Labor. In September the National War Labor Board ordered an annual increase of \$100,000 in wages to be apportioned among workers after negotiations between the company and employees had been completed.

While ODT controlled the line, U. S. operating practices were adopted, including Interstate Commerce Commission accounting procedure. The ICC lent experts to aid ODT operations, and WPB granted priority for the purchase of twelve diesel locomotives made possible by a Reconstruction Finance Corp. loan.

## BRANDY PRICE RISES

MADRID—Looking ahead to an early end of the war in Europe and to the reopening of old and lucrative markets, the Spanish government last week set a minimum export price on brandy which is nearly \$1 a case above the ceiling price allowed by Washington's Office of Price Administration. As a result, deliveries of nearly \$8,000,000 of

Spanish brandy for the United States market were abruptly halted.

The move caused only a mild flutter among the big shippers in the Cadiz area for, with few exceptions, they view the United States market as little more than a stopgap. Britain and the countries of northern Europe are traditionally the major markets for Spanish wines and brandies.

To meet OPA ceiling prices, Spanish dealers have slashed costs ruthlessly during the last year or more when they preferred the low-priced United States markets to warehousing their stock, but the quality of their product has suffered accordingly.

Aware now of the enormous cumulative demand for all alcoholic beverages as soon as the wartime trade and transport barriers end, the Spanish government has set a price which may dry up sales outlets for the next few months but is expected to provide the country with stocks which can be sold later at high prices to traditional customers.

## CANADA

### Rein on Profits

Canada finally is forced to begin renegotiation of many war contracts, but the approach is more elastic than in U. S.

OTTAWA—The Munitions & Supply Dept., Canada's counterpart of the U. S. War Production Board, figures for a long time that it could avoid renegotiation of war contracts. Now it has been forced to begin.

● **Danger for Industry**—Reason for the decision is evidence that many firms have made too-excessive profits. Also there is the danger that industry in general will be exposed to the charge of war profiteering at a time when private enterprise is under the guns of socialist politicians.

Ottawa wants to recover the money absorbed by too-high profits, but also professes a chief motive is to save business from the onus of later investigation of profits. Washington's renegotiation formula is taken more as a guide than a pattern for Canadian procedure. Ottawa's approach will be more elastic.

● **May Stretch Limits**—At the start of the war, Parliament passed a law limiting profits on war business to 5% of capital. This was found to be impractical in application. The amount of capital employed on a government contract by a manufacturer converting to

production could not be deter-  
ed.  
the objective set in renegotiation is  
on cost, but this is an outside ob-  
e and the department will not  
enforcement. The limit will prob-  
be 7% to 9%, or even higher in  
al circumstances.

**Be Judged Separately**—A contrac-  
ho has been careful about costs,  
the government the benefit of sav-  
and not tried to make more than  
sidered a fair profit will be treated  
leniently than a contractor who  
indifferent to costs and tried to  
all he could. The first contractor  
not be subjected to renegotiation  
if his profits were as high as 9%.  
second contractor may be forced  
to the minimum 5%.  
contractors are the main target  
negotiation, since their profits—  
ran frequently to 40%, and occa-  
sionally much higher—were the chief  
reason for the decision to undertake  
negotiation.

**Begin With 1942**—Except for cases  
aggravating profiteering, renegotiation  
start with 1942 contracts, earlier  
acts being ignored. Action will be  
primarily on examination of com-  
pany's financial statements. Firms sub-  
jected to renegotiation will be required  
to refund. Where the department  
withhold payments against adjust-

ment part of the procedure will be  
connection with excess profits taxes  
on unreasonable profits. Munitions  
supply proposes to require the con-  
tractor or subcontractor to get a refund  
from the National Revenue  
and turn it back to the depart-  
ment. It is also possible that the re-  
fundable portion (20%) of excess profits  
may be transferred to the depart-  
ment in payment of claims.

**Set Action**—Readjustment of sub-  
contractors' profits will be directly with  
government. Prime contractors will  
be involved except where their own  
profits were inflated through their hav-  
ing too much to the subcontractor.

## ON EXPENSES BANNED

Canada's new labor code (BW—Jan.  
1948) bars employers from pay-  
ing expenses of union employees on col-  
lective bargaining missions. Wartime  
Relations Board has ruled that an  
employer making such payments is liable  
to prosecution. The code included em-  
ployer contributions to union funds  
prohibited unfair practices. In  
effect now is an application to  
the Board for a ruling as to whether pay-  
ment for advertising in union publica-  
tions comes under the ban.

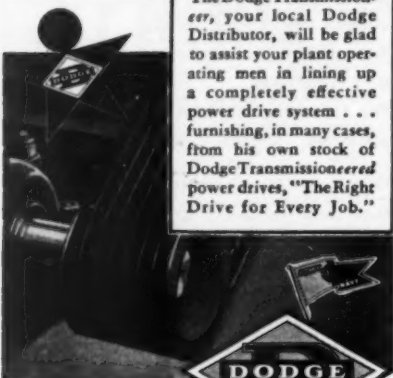
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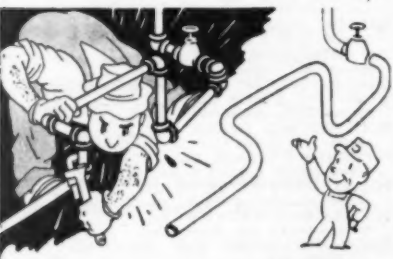
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Manufacturing Corp.  
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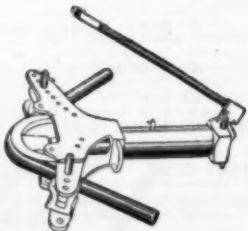
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## THE MARKETS

(FINANCE SECTION—PAGE 63)

The recent steady uptrend in stocks, which sent a number of price indexes to new six- and seven-year highs, ceased abruptly a few days ago when the stock market began to show signs finally that it could no longer cope successfully with the rising amount of selling by investors and traders anxious to protect substantial paper profits accumulating since D-Day.

• **Divided Opinion**—Many market students believe that this is only a technical reaction which will benefit the market subsequently. Even Wall Street's more rampant bulls had been expecting to see a corrective period in view of the consistent rise under way on the New York Stock Exchange since mid-April.

Other observers, however, can't altogether agree with that diagnosis of the market's current uneasiness.

• **New Appraisal**—This group thinks that the decline, which on Monday and Tuesday of this week was sufficiently drastic to wipe out most of the gains scored by the averages since July 1, may have been caused more by the market's new and more realistic reappraisal, brought about by recent favorable war news, of the reconversion uncertainties business and industry face in the event of a sudden end to hostilities in Europe.

To substantiate that belief, these observers point to the marked weakness that steel and other war industry stocks have shown.

• **Doubtful of Reaction**—They aren't so sure now, either, that the market's price structure as a whole is sufficiently readjusted yet to face a quick end of the European war without definitely unfavorable effects, at least temporarily. And

the rally staged by the market on Wednesday, did not impress them particularly because of the restricted trading volume accompanying the move.

Brokerage houses still report a substantial amount of stop-loss orders that might be touched off in the event of extension of the recent sharp sell-off.

• **Orders on Hand**—However, the quarters also report the receipt of buy orders priced at "under the market" which would furnish support in the event of resumption of the decline price trend, and most Street market prognosticators expect the market to be rising again once the current period price readjustment has run its course.

The London stock market, despite the sharp reduction in trading activity since the flying bomb attacks, has been disclosing consistent price improvement.

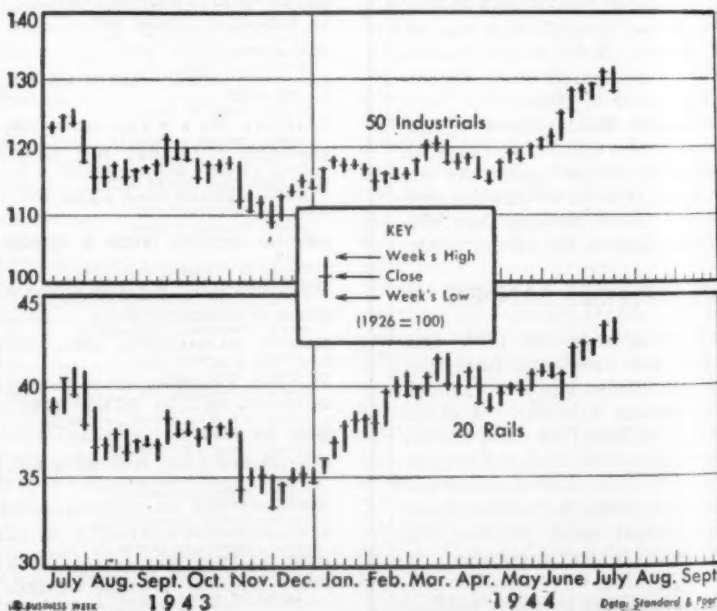
• **Not Too Pleased**—Nevertheless, some New York market analysts, more conservative London brokerage circles haven't particularly cared for the type of buying seen lately. Most of it has been definitely of the speculative variety.

### Security Price Averages

	This Week	Week Ago	Month Ago
<b>Stocks</b>			
Industrial . . .	128.4	131.0	128.5
Railroad . . .	42.6	43.3	42.1
Utility . . .	53.9	55.4	53.6
<b>Bonds</b>			
Industrial . . .	121.4	121.0	121.4
Railroad . . .	107.0	106.5	106.2
Utility . . .	116.3	116.4	116.1

Data: Standard & Poor's Corp.

### COMMON STOCKS—A WEEKLY RECORD





# THE TRADING POST

## News—A Reply

Metcalfe Walling, Administrator, Wage & Hour & Public Contracts Division, U.S. Dept. of Labor, writes to point out that criticism of his agency's enforcement of the Fair Labor Standards and the Walsh-Healey Act (BW-44119) has been publicly and elsewhere. In a letter to the New York Times he wrote:

When you published a statement by Mr. Jefferson Miley, secretary of the New York Commerce & Industry Assn., in which he argued that 80% of New York firms were in violation of the Wage and Hour Law or Public Contracts Act on the basis of my testimony before the House Un-American Activities Committee . . . that if the firms we inspected in this area were in violation. Lest Mr. Miley's apprehension may be widespread I felt it might be willing to set the record straight as follows:

Of course, the overwhelming majority of employers covered under the acts, in New York and elsewhere, are in compliance. Our inspections reach only a fraction of the total—about 9%—of covered establishments in any year and naturally are concentrated where we have had complaints or reason to believe that sore points exist. Consider the firms we inspect: a typical sample of New York industry would be made up of 80% of police investigations in convictions 80% of the people of New York are criminals.

Believe the significant figure is that for the region—New York and New Jersey—calendar year 1943, \$4,400,000 in wages of illegally withheld wages was due to 107,000 workers in nearly 10,000 establishments, and that even in these cases supposedly universally high wages were not paid. The restitution cases in this region involved failure to pay the minimum wage of 30¢ to 40¢ an hour.

In addition, of course, there are millions of workers in intrastate industry, the service industry, who do not come under the provisions of the acts.

Other points raised by the Miley administrator wrote:

That clearly exempts bona fide executives, professional, and administrative employees from its wage and hour provisions. The case of executives, the guaranteed minimum as low as \$30 a week; with administrative employees it is \$200 a month. It so happens that at the present time where wages are higher than they had been, employees are earning weekly wages in excess not only of those they earned but also, in some cases, of those who are supervising them. The worker, however, does not have the right in his position or the continuity of which the exempt executive, administrative, and professional employee has, which the exempt employees pre-

sumably are willing to waive the benefits of overtime pay. The relatively few employers who find themselves in difficulty in this regard are those willing to sail close to the wind in attempting to avoid payment of overtime simply by calling employees executive or administrative, when their duties do not fall within the definition.

## Note to Postwar Educators

A reader writes as follows:

It may be of interest to you to know the reaction I got from a talk with a veteran of this war. He is a young man, 24, who has completed his 25 missions, and has been returned for recruiting service in this country.

Discussing what he wanted to do after peace is declared, he said that he would like to finish his education, but that, because of economic conditions, it would be necessary for him to go to night school. He said very clearly that he would not want to go to the type of classes that are being conducted now by universities and colleges. He said that he had become a man in every sense of the word as a result of his experiences, and that all the small-time stuff which once glamoured school for him had passed.

He also expressed the opinion that, because this is a mechanized war, most of the men who return and want to continue their education will have to have some work which will occupy their hands as a supplement to their minds.

This opens up a very interesting phase of the whole postwar problem and makes it clear that, when the ten or eleven million men in the services are released, provision will have to be made for them both by industry and education in accord with their desires and not necessarily according to postwar plans that may be conceived now by those dealing with that subject. The planners in this field had better discuss the future with the men who are in the service or who have returned.

Those who will be responsible for postwar education programs for veterans probably will find one of their toughest problems in this difference of attitude between the traditional undergraduate and the man who has lived through the test of battle.

## Footnote on Education

Speaking of education, newspapers this week carried the story of the death in obscurity of a "boy wonder" of 30 years ago. An accountant at the age when most boys are not yet in school, he was graduated from college at 16 and a brilliant future as a mathematician was forecast for him. But he soon dropped from sight and one of his last jobs was operating an adding machine. He had never learned to assume responsibility.

W.C.



You can hold it down at a cost of less than 1c a man per week

A rising temperature and a rising number of absentees usually go together. One reason is sweat.

Sweat robs the body of essential salt. This loss of salt dehydrates the body. It thickens the blood. The result is Heat-Fag. Workers are tired, easily fatigued.

Water alone can't replace the fluids lost through sweat. Water alone in hot, sweaty conditions dilutes body fluids and causes heat cramps.

The real answer is water and salt tablets at every drinking fountain. Then workers who do hard work and sweat can take a Morton's Salt Tablet every time they take a drink of water. This is the easy, simple, sanitary way to maintain the proper salt balance. It is recommended by industrial physicians and endorsed by America's greatest corporations.

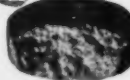
This is What Happens When Sweating Robs the Body of Salt . . .



**MORTON'S**  
*Heat-Fag*  
**SALT TABLETS**

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# THE TREND

## HOW MUCH CAN WE CUT TAXES?

The job of framing postwar taxes is now the order of the day. Objective: to free business for planning peacetime expansion by clarifying the tax prospect.

• **Clarification must start with an estimate of the postwar budget.** Five billion dollars for interest on the debt, another five billions for national defense, and the remaining billions needed for such items as veterans' care and general administration, carry that estimate to twenty billions a year (BW—Jun.5'43,p108). And this regular budget will be largely independent of how good business is or how high prices run. Such major items as interest and pensions are just about fixed, and such others as soldiers' and government employees' pay are almost so.

Then, while the federal government is now collecting over forty billion dollars annually in taxes, we must recognize that our choice among postwar tax cuts will start from a much lower figure. First, everyone agrees on ending the excess profits tax. Second, even at full employment, the postwar national income will be lower than today's 155 billions a year (BW—Mar.25'44,p120), and government receipts will drop with the level of income. According to some government estimates, formerly confidential but recently published, our present taxes, excepting those on excess profits, should yield about 31 billions in revenues from a national income of 140 billions, only 26 billions from an income of 120 billions.

• **This limits our choice among tax reductions.** At 140 billions income, halving present excises would cost over 2½ billions, repealing today's 3% normal tax on individuals would cost 3 billions, lowering the first personal surtaxes from 20% to 15% would cost almost 3 billions, and ending double taxation of dividends (taxing of both corporation and stockholder) would cost 2 billions.

Thus, even this limited scheme of cuts would reduce revenues about to budget size. It would leave in effect a 40% tax on corporate profits, and personal income taxes starting at 15% over exemptions of only \$1,000 per couple, rising to a rate of 84% on income over \$100,000.

To cut any one tax more would mean to cut other taxes less, and, should income turn out to be 120 billions instead of 140 billions, even the alternatives outlined would be impossible. This brings up the question of at what level of national income we should try to balance the budget. Suppose we decide to do it at just about the full-employment level; what will that be? To this you can get two answers from two of the first reports on postwar taxes: "The Twin Cities Plan" published by the Twin Cities Research Bureau last week, and "Fiscal and Monetary Policy" by Beardsley Ruml and H. Chr. Sonne, to be published this week by the National Planning Assn. The Twin Cities Plan, drawn up by a group

of tax-minded businessmen in Minneapolis and St. Paul, assumes full employment at a national income of 140 billions in 1942 prices; Ruml-Sonne assumes very close employment at a national income of 140 billions in 1942 prices. The 20-billion difference is due to varying estimates of our postwar labor force, its productivity, and price. Most estimates of income at full employment towards 140 billions, but all are something of a guess.

• **Now, tax yields will vary by three or four billions according to which income level you take.** But suppose we take one set of figures—say Ruml-Sonne's. We still ask whether we should try to balance the budget close to full employment, or well below. This question concerns basic economic policy and the public debt.

If we tried to balance at a national income of 120 billions, and got only 120 billions, our tax receipts would leave us with a deficit of three or four billions. If we tried to balance at 120 billions, and got an actual national income of 140 billions, we would have a surplus for debt retirement of three or four billions. Which should we do? Or should we attempt to balance at, say, 3 billions of the debt a year even at a 120-billion income? Our choice among such debt alternatives makes a difference of several billions in taxes.

Finally, having agreed on arithmetic and policy, we decided to balance the budget at some income level. Where shall we take tax cuts?

Both the Twin Cities Plan and Ruml-Sonne assume that we shall have to handle an 18-billion postwar budget but since the former assumes a lower income level, its taxes must be sharper than the latter's. After proposing some cuts in excises, an end to double taxation of dividends, and so on, the two plans end up with almost identical tax schedules for individuals. But Ruml-Sonne estimates that these will yield 13 billions as against the estimate of only 8 billions in the Twin Cities Plan, and so proposes ending all but a minor levy on corporate profits, whereas the Twin Cities group still sees a need for a 40% corporate tax. Some of the difference in estimates of yield is explainable, but much remains in the realm of debatable arithmetic. Government estimates of yield tend to be lower than those of either plan.

• **In short, knowing that postwar tax cuts can't be made until we must not only decide such basic policy questions as when to repay the debt and where to take major tax cuts but we must also compute more precisely what capacity income will be and how much any set of taxes will yield.** In the end, we're apt to find the political arithmetic dictating slight cuts in all taxes, no corner shifts from one tax to another (BW—Nov.27'43).

The Editors of Business Week

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